# RWANDA AGRICULTURAL SURVEYS AND POLICY ANALYSIS PROJECT (696-0126)

# **MID-TERM EVALUATION**

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by

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#### ABBREVIATIONS AND ACRONYMS

ADO Agricultural Development Office

ASAP Agricultural Survey and Analysis Project

ASPAP Agricultural Surveys and Policy Analysis Project

CIC Interministerial Coordination Committee

CIC/RD Interministerial Coordination Committee for Rural Development

DAI Development Alternatives, Inc.

ENA National Agricultural Survey

ENCB National Household Budget and Consumption Survey

FAC Fonds d'Aide et de Coopération

FRw Rwandan francs

GOR Government of Rwanda

IAMSEA Institut Africain et Mauricien.des Statistiques et de l'Economie Appliquée

LTTA Long-term technical assistance

MINAGRI Ministry of Agriculture, Livestock and Forests

MINIFIN Ministry of Finance

MINIFINECO former Ministry of Finance and Economy

MININTERDECO Ministry of the Interior and Communal Development

MINIPLAN Ministry of Planning

PIL Project Implementation Letter

PIO Project Implementation Order

ProAg Project Grant Agreement

PP Project Paper

PRIME Policy Reform Initiatives in Manufacturing and Employment Program

PT() Project Technical Group

REDSO/ESA Regional Economic Devslopment Support Office, East and Southern Africa

SESA Services des Enquêtes and des Statistiques Agricoles

SPSS/PC Statistical Package for the Social Sciences, PC Version

STTA Short-term technical assistance

TA Technical assistance

UNR Université Nationale du Rwanda

# I. INTRODUCTION

This report presents the findings and recommendations of an evaluation team assembled by USAID Rwanda for the purpose of conducting a mid-term evaluation of the Rwanda Agricultural Surveys and Policy Analysis Project (ASPAP). The team consisted of Charles Steedman, team leader, economist and Assistant Director of the Center for Research on Economic Development, University of Michigan; Christine Elias, sociologist and Research Associate of the Center for Research on Economic Development; and Dr. Pierre Nyabyenda, Director of the Crop Production Research Department of the Institut des Sciences Agronomiques du Rwanda (ISAR). Dr. Jean Bagiramenshi, Director of the Animal Production Department, Ministry of Agriculture, Livestock and Forests (MINAGRI) joined the team as an observer and participated fully in its meetings and deliberations. Members of the team worked in Rwanda from 17 May to 9 June 1989.

Our work has been tremendously facilitated by the ready availability of USAID and Rwandan government officials. We wish to acknowledge here with grateful thanks the superb cooperation of USAID Rwanda, of the Agricultural Statistics Division, of the Ministries of Agricultural and Planning, and of the Presidency. Everyone was most helpful. We especially want to thank Dr. Gregory Lassiter, Development Alternatives, Inc. (DAI) Contractor Representative, for the extraordinary amount of time and effort he devoted to informing and helping us.

This final version of the report has benefited from comments on earlier drafts provided by USAID and DAI, in particular by Paul Crawford of USAID and Dr. Lassiter. The opinions expressed herein as well as any remaining errors of fact are our responsibility.

#### II. SUMMARY AND RECOMMENDATIONS

The Rwanda Agricultural Surveys and Policy Analysis Project (ASPAP) has carried on and expanded the work of another project (ASAP), which ran from May 1981 to September 1987. The first project is considered to have been highly successful. Before it began there had been no agricultural census in Rwanda and no objective attempt to collect basic agricultural statistics. As a direct result of ASAP, an effective national structure for agricultural data collection and analysis was in place by 1985. There are now annual surveys, and the methodology is being continuously refined to make the survey more efficient and more accurate.

Both projects have primarily supported the national agricultural statistics service, still familiarly known by its French acronym SESA (Service des Enquêtes et des Statistiques Agricoles). ASAP did so exclusively, but ASPAP has also worked with statistical units in two other ministries. The successes of the two projects have been achieved by SESA, which has been elevated within the Ministry of Agriculture (MINAGRI) to the status of a division under the Secretary General. Donors regularly turn to SESA to conduct special studies as well as to provide good quality data on the agricultural sector. All of this has occurred in the relatively short period of eight years.

ASPAP's designers intended to move beyond data collection to economic analysis. They wanted to see studies feeding into the policy-making process. ASPAP's purpose is "to improve policy formulation for the rural economy by improving the quality and increasing the quantity of the information base from which policy is formulated and by strengthening the institutions responsible for provision of such information." The inputs considered necessary to achieve the purpose consist of two long-term agricultural economists (84 person-months), a number of short-term advisors (112 person-months), long-term training (8 masters degrees), short-term training (50 person-months), construction of a new wing on SESA headquarters, 14 vehicles, \$146,000 worth of computers and software, and a \$900,000 contribution to local costs.

In most respects the ASPAP project is a very good one. It is nonetheless to be expected that there are unresolved issues and a few problems. These should not obscure the tremendous gains that have been made. Compared to what lies ahead, the accomplishments to date have been the easier ones. Having an impact on policy formulation will be a longer and more difficult process than ASPAP's designers envisaged. This is true in part because there are no obviously bad policies that are candidates for immediate change. There is also a wide gap between good data collection and sound analysis on the one hand and having high officials use the results to formulate policies on the other. In Rwanda there is increasing openness to the idea of using data in this fashion, but the gap is still quite large.

The following sections briefly summarize our findings on the issues of principal concern and then list our recommendations under each heading.

#### A. SESA

ASPAP support to SESA includes long- and short-term technical assistance as well as material and financial inputs (computers, vehicles, etc). SESA is well on its way to producing well-trained staff, a maintainable data base, pertinent analyses and publications, and expert consulting services. There are, however, several steps which could be taken to strengthen SESA even further.

- 1. <u>Disseminate agricultural production data</u>. No formal mechanism has yet been established to disseminate the recurrent agricultural production data collected seasonally by SESA. Except for one data table per season (total production per crop by prefecture) presented in interministerial memos, these data are made available to potential users only when requested. Seasonal bulletins of agricultural production statistics should be published and widely distributed. They could be published as a series, retroactive to the 1984 National Agricultural Survey, and include a brief narrative noting production trends or perhaps linking the statistics with climatic variables. Annual summaries should also be compiled and distributed.
- 2. Encourage wider distribution of SESA products. The results of a number of substantive studies have been published by SESA (see Appendix C). Some reports are the result of commissioned studies; others were prepared for SESA's major agricultural policy seminar held in April 1989. The results were well received by those who have seen the reports or who participated in SESA seminars. However, circulation of SESA's reports is quite limited. There should be a much wider distribution of SESA products. The Planning and Economic Affairs Services at the Presidency, ISAR, the University, selected regional officials and others should be on an expanded distribution list, maintained by SESA itself. The plan to circulate to over 200 addressees a comprehensive, annotated publications list is clearly the first step towards this end. To aid in this effort, SESA should make maximum use of the desktop publishing capability it is in the process of developing.
- 3. <u>Publish a "discussion paper" series</u>. SESA should consider publishing a "discussion paper" series in addition to its current working papers. This would consist of occasional short papers by staff members with the objective of promoting wider comprehension of the policy implications of SESA's research findings. The papers should be relatively short, limited to a summary of research results and a clear exposition of possible policy conclusions that may be drawn from them. In some cases specific policy recommendations could be made.
- 4. <u>Contribute articles to local journal</u>. SESA staff should write articles for publication in <u>Dialogue</u>, a bi-monthly journal on communal and rural development published in Kigali with a circulation of 1,900. Articles like the recent one by Nick Minot, a short-term advisor to MiNIPLAN, would make SESA's efforts better known. The papers written for SESA's recent seminar on agricultural policy issues could serve as the basis for the first of these articles.

5. Set research priorities. SESA's capacity to conduct special studies has been recognized. As more studies are commissioned, SESA's reputation is enhanced. The World Bank commissioned a major study on land tenure and fragmentation. Other studies include an EEC-funded fertilizer study and a planned coffee production study, to be financed by the coffee marketing board. There is a danger of placing too much emphasis on consulting services. SESA's research may ultimately be driven more by donors' agendas (and its own financial needs) than by rational research plans developed by SESA in collaboration with data users. SESA needs to set its research priorities. To date, SESA's activities, while producing quality results, have been conducted largely on an ad hoc basis. Setting research priorities should be an iterative process which takes into account SESA's research strengths and available resources as well as data user needs. Study topics should be prioritized and periodically reassessed as the staffing and financial structures change or as demand for specific research results evolves.

Before SESA's director departs to complete his M.S. training and while most of the recurrent short-term technical assistance (STTA) personnel are in country, the staff should collectively evaluate SESA's priorities for future data collection and analysis. Decisions should be made on allotting staff time to developing new special studies, disseminating the results of completed studies, designing and field testing new seasonal questionnaires, etc. Near- and long-term work plans should be developed for SESA as a whole and for each analyst. Support staff time (data entry personnel, field staff) should be allocated to specific activities.

- 6. <u>Submit revised "harmonization" proposal to MINAGRI</u>. Within MINAGRI, both SESA and the Direction Générale of Agricultural Production collect agricultural production statistics. SESA's are considered to be reliable but do not cover Rwanda's 141 rural communes. The DGPA's are in fact traditional estimates by extension personnel (monagris) at the commune level. SESA cannot match this level of disaggregation with its scientific methods at reasonable cost. While it is generally accepted that any duplication of effort should be eliminated, there is far less agreement on how to obtain reasonably accurate yet affordable commune data. SESA has spent considerable time trying to develop a "harmonized" data collection system. Several proposals have been discussed, but the problem is still unresolved. The initiative for submitting a revised harmonization proposal to MINAGRI now rests with SESA. It should be extremely conservative in its expectations and should propose a pilot test only -- for example, in one prefecture which has an average resource endowment. The experience should be carefully evaluated, taking into account SESA's financial and manpower limitations, monagri performance, and the projected cost of expanding the program nationwide.
- 7. Reconsider aerial photography proposal. The institutional contract with Development Alternatives, Inc. carries an unbudgeted option requiring the Contractor to arrange for aerial coverage of Rwanda if it is decided through the work plan process to proceed with this expenditure. The Project Technical Group (PTG), which drafts the annual work plan, decided not to include the proposal in the 1989 document because it was not convinced of its appropriateness for local conditions. Nevertheless, we recommend reconsidering the latest proposal to use a low-altitude aerial photo sampling technique developed in Kenya. Representatives of the International Union for the Conservation of Nature and Natural Resources (IUCNNR) and Exploration Photography (EP) in Nairobi might be brought to Kigali to explain their aerial point sampling methodology and demonstrate their photo interpretation techniques. With the information obtained from these firms, staffing and budgetary costs to implement the survey can be weighed against expected benefits.

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# B. MINIFINECO Unit

ASPAP support to MINIFINECO has been confined to the Sector Studies Division of the Direction Générale de la Politique Economique. The project provided training, computers, vehicles, technical assistance and local cost support for a rural commune recurrent cost study, now almost complete. By January 1989 the MINIFINECO unit had virtually used up (and in some cases exceeded) its allotment of project resources. The Division itself was dissolved in a GOR ministerial reorganization in April 1989 while other divisions in the Direction Générale were transferred to MINIPLAN.

The position of the former director of the ex-MINIFINECO unit is that the ASPAP connection should now be terminated. He gives as reasons the completion of the recurrent cost study, the disappearance of the ASPAP-supported Division, and the virtual exhaustion by the Division of its ASPAP resources.

Consolidate ASPAP support to the ex-MINIFINECO unit and MINIPLAN. We concur with the suggestion that ASPAP support be terminated to the ex-MINIFINECO unit as such. Instead, any remaining resources should be combined with those available for the MINIPLAN unit and used, as suggested in the next recommendation, to strengthen a new, combined unit in the Economic Analysis Department of MINIPLAN.

### C. MINIPLAN Unit

The PP expected the project to complete analysis of data generated by a 1983 national household budget and consumption survey (ENBC) and to become involved in new surveys. The Project Agreement focused more on the rural economy, specifying the rural part of the ENBC and rural employment. The ProAg also states that the project would work with the Direction des Enquêtes Statistiques within MINIPLAN.

To date, USAID (through ASPAP and other projects) has invested seven person-years to process and analyze only a part of the data from 270 of the 1,170 rural households surveyed. Project technical assistance has done most of the work itself. Although MINIPLAN agreed to provide counterparts, a mere five person-months of the seven years were covered. Repeated requests for counterparts were unavailing. No one remains at MINIPLAN who is trained to process data for the urban survey or to continue analyzing the rural data.

The most recent ASPAP contribution is a long-term agricultural economist who arrived in November 1988. MINIPLAN specified the following areas in which he would work: ENBC data analysis; planning and coordination of other surveys; and training of Rwandan staff. In fact, he has worked exclusively on cleaning, not analyzing, the ENBC urban data and has yet to be assigned a counterpart. In our view, this perpetuates the tremendously inefficient use of a PhD economist.

- 1. Seek to transfer the LTTA elsewhere within MINIPLAN. Our discussions with the Minister and Secretary General of MINIPLAN indicated that this is an opportune time for USAID to push to resolve the LTTA counterpart dilemma. MINIPLAN's two top officials are new to their posts and appear receptive to new ideas. Neither is as well informed about ASPAP as he should be. USAID should review the current situation with the Minister and Secretary General at an early date, proposing Option 1 (Section V.C.5) as a workable solution. If a counterpart for Dr. Ansoanuur can be identified and agreement can be reached on a suitable scope of work, the new plan should be enacted without delay.
- 2. <u>Encourage productive utilization of existing MINIPLAN data</u>. MINIPLAN has collected a large quantity of data, much of which may never be analyzed. ASPAP's involvement with MINIPLAN

should be geared towards making better use of available data and should discourage the channelling of scarce resources into new surveys with hardly a reference to the old ones.

#### D. <u>Project Management</u>

It is difficult to avoid the conclusion that ASPAP would be an even better project and would progress with fewer hitches if USAID Rwanda were able to pay greater attention to several details of project management. This is not to say that all of the project's management problems can be laid at the door of the local mission. The obligation to use contracting and other management services located at the regional office in Nairobi has hindered project implementation. Sections V.B. and V.C.1. discuss the present system of project management and specific problem areas. The following recommendations would help ameliorate the situation.

- 1. Organize semi-annual project management meetings. Some part of the difficulty in project management can be attributed to poor communication between the USAID mission and Rwandan officials responsible for the project on the one hand and within the USAID mission on the other. We recommend that there be semi-annual meetings attended by the USAID Director, the Rwandan Project Director, the USAID project officers, the MINIPLAN unit representative, and the Contractor's representative. There should be an agenda drawn up and communicated to participants in advance. It should deal with recent project accomplishments, unresolved problems and plans for the next six months. This is in no way intended to replace PTG meetings or the annual work plan. The semi-annual meeting should focus attention on implementation problems and hasten their solution.
- 2. <u>Simplify key project working documents</u>. The annual work plan submission and the Project Implementation Letter which approves it should be simplified and clarified. We have suggested a model PIL for local costs which would help accomplish this.
- 3. <u>Improve project monitoring</u>. The ADO office needs to find ways to keep closer track of project disbursements so that problems can be identified before they become too serious and so that unexpended funds in PIOs or PILs can be de-committed for use in other ways.
- 4. Relieve Contractor representative of administrative burden. As it improves its monitoring, ADO should attempt to relieve the Contractor's representative of administrative burdens that fall outside of contract implementation. Anything that has to do with the project budget categories labeled Technical Services, Construction, Commodities, or Local Support for Advisors and Local Costs falls outside of the institutional contract and within the direct responsibility of ADO.
- 5. Locally hire a second assistant for Contractor representative. The Contractor's representative should spend more time on substantive work and less on administration. He should be permitted to hire locally a second part-time assistant, perhaps an American if one can be found, who would handle the time consuming arrangements for visits by STTA and attend to their logistical needs in Rwanda. Any slack time could be devoted to assisting with logistical, accounting and monitoring duties, with administration of the training program and with routine communications between DAI headquarters and Kigali.
- 6. <u>Produce quarterly rather then semi-annual Contractor representative reports.</u> The Contractor representative's semi-annual reports are complete, very well done and informative. They take too much of his time, however. <u>Much shorter quarterly</u> reports of 4-5 pages in length (plus tables) that focus on recent accomplishments, immediate problems, proposed solutions, and plans for the near future would be quite satisfactory.

7. <u>Improve monitoring of local costs</u>. Immediate attention should be given to local cost budgeting and accounting for the project, which is entrusted to SESA. A better and more rigorous system appears to be needed. There are discrepancies and inconsistencies in the local cost accounting documents available at SESA. Whether the problem resides in the system being used or in a lack of accounting skills is not immediately evident. An outside consultant or accounting firm could be retained for a short period, two to three weeks, to assess the current system and the skills of accounting staff, design a new system if necessary, Install it at SESA, and train staff in its use.

#### E. Local Operating Costs

Local costs have been a matter of concern. In early 1989 a cash-flow crisis over local costs brought to a head two problems: (i) Inadequate monitoring and delayed reimbursement of local cost expenditures from the project budget; and (ii) obtaining the GOR counterpart contribution to these operating costs. The outlook is now more positive, at least with regard to the first problem. USAID recognized the acuteness of the situation in May and is taking steps to bring reimbursements up to date and to provide an advance for local costs. A comprehensive solution might include the following actions.

- 1. Reduce expectations for GOR cash contributions. The PP specified that the GOR share of local costs would progressively increase. By 1990-91, the GOR's contribution was supposed to cover at least 80% of local costs. Actual contributions for SESA, which has the highest level of local costs among the three project units, have been minimal. One budget cycle was missed, and the Government's 1989 Development Budget had not yet been approved at the beginning of June. An early contribution from this source would be welcomed, but it is clear that austerity budgets will prevent the GOR from meeting the 80% goal by the project's final year. Since the Government appears to be paying salaries of project personnel as expected, there is little danger of the total GOR contribution falling below 25% of project costs. However, it would be appropriate to (i) insist on a detailed accounting of project staff salaries paid by the GOR to date and (ii) push for SESA's inclusion in the GOR Recurrent Budget, rather than the Development Budget, now that SESA is a division in MINAGRI.
- 2. <u>Eliminate percentage basis of GOR contributions</u>. GOR cash contributions to local operating costs should be calculated on reasonable expectations of what GOR budgets may allocate rather than on increasing percentages of the local cost total. Greater effort should be made to identify local costs that the GOR has actually paid for the MINIPLAN unit and to documenting these contributions since only vague estimates are currently available.
- 3. Consider reallocation of project resources. A reallocation of project resources to supplement the current budget for local operating costs will be necessary in the last year of the project. If the aerial photography option were not pursued, there would be a saving of \$250,000 which could be moved to local costs. We are not, however, prepared to make such a recommendation at this time since the issue of data collection at the commune level is unresolved. A better alternative is to cut the \$120,000 budgeted for the University of Pittsburgh for in-country seminars at least in half (two seminars instead of four), if not to eliminate it entirely. Additional trade-offs within the budget will probably still be necessary.
- Improve budgeting for and accounting of local costs. See recommendation D.7.

#### F. Institutions

The PP's discussion of the institutional framework of ASPAP leaves questions unanswered. The following gaps are of particular concern: (i) The GOR institution to which the PTG was to be

accountable, the Interministerial Coordinating Committee for Rural Development (CIC/RD), has had no role in ASPAP. In practice, no senior GOR body provides guidance for ASPAP activities. (ii) Project management has been skewed towards administrative matters at the expense of project content and direction. To fill these gaps, the following recommendations should be considered.

- 1. <u>Create a project management committee</u>. Consideration should be given to the creation of a <u>comité de gestion</u> such as exists for many other projects. It might consist of representatives of MINAGRI, MINIPLAN, MINIFIN, MININTERDECO, IAMSEA and UNR. Ministry representatives would not otherwise be involved in the project. The Committee would meet at least twice a year to give direction to project research activities and approve the annual work plan before submission to USAID. It would also approve an annual report and would arbitrate, if necessary, between the project units.
- 2. <u>Seek consensus on role of the PTG</u>. The PTG mandate specified in the ProAg places a clear emphasis on overall planning of project activity and on substantive discussion of methodologies and results. In actuality, the PTG has met infrequently (only one informal meeting so far in 1989) and has devoted almost all of its time to the division of project resources among the three participating units. The role of the PTG should be redefined and agreed to by USAID, SESA, MINIPLAN, and the newly created project management committee.

### G. The Next Project

ASPAP has little more than two years to run. It cannot be expected to achieve its policy-impact objectives in that time. A successor project should be designed in mid-1990. A year from now SESA should have asserted its role within the Ministry as the prime supplier of data and statistical analysis, the harmonization problem should be solved, and future directions should be clearer. By then a revamped and relocated MINIPLAN unit should be demonstrating some potential. Yet even if these optimistic predictions come true, when ASPAP comes to an end in 1991, five long-term trainees will have just obtained their masters degrees. Their contribution to MINAGRI and MINIPLAN and the full benefits of the groundwork laid by ASPAP can only be made manifest in the course of a new project.

The new project's goal should be to establish as routine the continual updating and analysis of sector data, followed by explorations of policy implications of new developments and trends. As this role is further consolidated, SESA (or DSA as it will then be known) might provide guidance for the full computerization of MINAGRI. There will be need for an integrated system which would permit all divisions to use SESA's data for sector investment planning, project monitoring and evaluation, personnel management, staff training, and other uses. Most African Ministries of Agriculture are facing such a transition. The new project could help Rwanda lead the way.

# III. PROJECT ORIGINS AND OBJECTIVES

The Agricultural Surveys and Policy Analysis Project (ASPAP) overlapped and succeeded the Agricultural Survey and Analysis Project (ASAP), which ran from May 1981 to September 1987. The first project is considered to have been highly successful. Before it began there had been no agricultural census in Rwanda and no objective attempt to collect basic agricultural statistics. There was no system for conducting any sort of objective farm-level survey on a national scale, very little survey experience and virtually no trained staff for such an effort. Instead, the country relied entirely on subjective annual estimates by extension agents.

As a direct result of ASAP, an effective national structure for agricultural data collection and analysis was in place by 1985. A national agricultural census the previous year had for the first time

produced accurate data on cultivated area, crop production and livestock for Rwanda's 10 Prefectures, for 12 agro-economic zones and for 5 geographic regions. In subsequent years there have been annual surveys. The methodology has been continuously refined to make the survey more efficient and more accurate.

The microcomputer revolution has been so rapid that ASAP's use of the Rwandan government's sole mainframe computer and its reliance on the creation of 16 major COBOL programs now seem anachronistic, even though this occurred as recently as 1984/85. It also seems anachronistic that the project found it necessary to process some data in Washington at the U.S. Bureau of the Census, an ASAP participant. As recently as 1988 it required over 18 months of COBOL processing on field area data before the effort was abandoned because of bugs in the program.

All of this has changed. The national agricultural statistics service, still familiarly known by its French acronym SESA (Service des Enquêtes et des Statistiques Agricoles), has been elevated within the structure of the Ministry of Agriculture (MINAGRI) to the status of a division under the Secretary General. Now the Division des Statistiques Agricoles (DSA), it is equipped with a battery of nine IBM microcomputers of the AT, XT and PS/2 variety. It has a headquarters staff of seven analysts and statisticians, including two who will receive MS degrees from Michigan State University within a year. In addition, it has a field staff of 10 supervisors, 33 office staff and 78 enumerators, all of whom now have solid survey experience. Donors regularly turn to SESA to conduct special studies as well as to provide good quality data on the agricultural sector. All of this has occurred in the relatively short period of eight years.

#### The link to Policy

As early as 1985, however, when ASAP received a mid-term evaluation, it had occurred to some in USAID that good objective data and even solid economic analysis from the data were but a first step. There could be even greater impact if these advances could be used to adjust policy, though it was generally admitted that Rwanda suffered from fewer distortions caused by bad agricultural policy than did most African countries.

In early 1985, evaluators found that government officials were more receptive than they had been to the idea that SESA could provide valuable help in planning and policy deliberation. This did not mean that there was an open door. Thought was then being given to a Fourth Five-Year Plan, which was to have run from 1986 to 1991 but which has never materialized. Officials seemed to think that SESA's more accurate knowledge of the agricultural sector could be a useful tool in the planning effort, but the idea that SESA would <u>analyze</u> policy did not appear, as the evaluation put it, important or even advisable to the Rwandan Government. The evaluators did not share this perception, considering as they did that it was logical and desirable for SESA to become a policy analysis bureau.

The ASAP project was certainly successful but it would have been strange indeed if it had been without problems. One distinct difficulty was the absence of an agricultural economist on the long-term technical assistance team. This lack was thought by the 1985 evaluators to have seriously hampered SESA's ability to perform pertinent analysis, and SESA was at the time understaffed with only three Rwandans, none of whom had been trained in agricultural economics.

# **Expansion to New Ministries**

The second project (ASPAP) was therefore seen as an opportunity to strengthen SESA's capacity for analytical work by emphasizing agricultural economics, both as a skill to be required of

the new head of the technical assistance team and as a priority discipline for long-term training in the U.S. Increased analytical capability, however, was to be only a means to an end, an ability to influence policy making. Since MINAGRI was only a technical ministry and not a coordinating ministry, it was deemed necessary to bring into the project both the most important coordinating ministry, Finance and Economy (MINIFINECO), and a then less influential but potentially important ministry, Planning (MINIPLAN). Both had statistical units which, it was thought, could be linked to SESA and strengthened by the new project so that policy decisions could be better informed.

Indeed, the first project had already begun to provide significant help to MINIPLAN in the form of technical assistance, computers and software to assist in the processing of a major nousehold budget and consumption survey. The link was made when an ASAP computer advisor's help was solicited and he saw the potential for linking data on crop and livestock disposal in the household budget survey with data on production from the farm survey. In its pilot phase, the agricultural survey had used the same sample.

#### The Project Paper

The Project Paper (PP) for ASPAP was signed on 29 August 1986. It argued that "more attention must be paid to actually having studies feed into the policy making process, and that they not simply be relegated to shelves." [PP, 12] How this was to happen was not made entirely clear. "Policy makers" are cited numerous times in the PP, but who they were and where they sat was not specified except in the case of Interministerial Coordination Committees (CIC). These committees had recently been created on paper and the one concerned with rural development was seen as an important link for ASPAP. It was to become involved, for example, in the process of approving annual work plans drafted by the Project Technical Group (PTG). The PP also foresaw publications and seminars as ways to bring the project's policy analysis to the attention of the proper audience.

"ASPAP will work more to inform GOR policy makers by actively engaging them in the defining of project activities, by emphasizing timely presentation of results, such as in readable publications and in well-attended seminars, and by taking advantage of the CIC mechanism, whereby project activities will <u>automatically</u> feed into the policy making process." (Emphasis added) [PP, 12]

This last assertion may have sounded convincing to some readers of the PP, but the CICs, which were new at the time and from which much was expected, have not proved to be the ready conduit for policy advice that the designers anticipated. They do play a role in policy formulation by acting on formal proposals but do not normally consider documents such as annual work plans.

The goal of ASPAP is to increase productivity and employment on and off the farm. Its purpose, according to the PP, is to improve policy formulation for the rural economy. This statement was expanded in the Project Grant Agreement of 30 August 1986 to read:

"The purpose of the Agricultural Surveys and Policy Analysis Project (ASPAP) is to improve policy formulation for the rural economy by improving the quality and increasing the quantity of the information base from which policy is formulated and by strengthening the institutions responsible for provision of such information." [ProAg, annex 1, 1]

<sup>&</sup>lt;sup>1</sup>MINIFINECO became MINIFIN in April 1989 but is referred to in this report by its old acronym.

#### **End-of-Project Status Objectives**

The Project Paper expected that a number of changes in the agricultural sector would be observable by the end of the project on 30 September 1991. These were:

- 1. Improved policies and project interventions.
- 2. Increased demand by policy makers for information and analysis.
- 3. A stronger role for MINAGRI in policy formulation.
- 4. Policy maker recognition of SESA and its counterparts in MiNIFINECO and MiNIPLAN as being responsive to their needs.
- 5. Improved collaboration among GOR agencies and donors in the dissemination of data and analysis and in policy formulation.
- 6. The establishment of a dialogue on policy between project professionals and members of the CICs at the technical level.
- 7. A more informed GOR-USAID policy dialogue as the result of project surveys and studies. [PP, 14]

#### **Project Inputs**

To attain the goal and objectives of the project, the designers proposed to concentrate project resources on SESA while providing support to the Direction des Enquêtes Statistiques (Statistical Survey Department) at MINIPLAN and to the Direction Générale de la Politique Economique (Economic Policy Department) at MINIPLECO. Support was to consist of the usual elements: long-and short-term technical assistance, training, commodities, construction and budgetary help.

Specific quantities of support were envisaged by the designers, but the Project Agreement's Amplified Project Description (Annex 1) stated that the USAID contributions discussed below were "an illustrative distribution." They could be reprogrammed in the annual work plans without a formal amendment of the ProAg. The work plans were to be prepared by the Project Technical Group (PTG), submitted to the CIC for Hural Development (CIC/RD) and then approved by USAID. The PTG, foreseen as a crucial cog in project implementation machinery, was to consist of the directors of each of the three GOR units, a representative of USAID and "project advisors." The last term presumably meant long-term technical assistance personnel. [ProAg, Annex 1, 2-3]

#### MINAGRI/SESA

For SESA, the PP envisaged three or even four long-term technical assistance personnel. There were to be a total of 10 person years of long-term technical assistance in agricultural

<sup>&</sup>lt;sup>2</sup>As will be evident, this mechanism was used to change the mix of long- and short-term technical assistance. It does provide flexibility in case circumstances change, but care should be taken to avoid hasty reallocations; in any case, the USAID mission has a veto because it must approve the work plan.

economics, computer science, social science and survey methodology. An agricultural economist was expected to be the first to arrive in Rwanda and to be the team leader. In addition, 16 person-months of short-term technical assistance were to be provided in survey design, statistics and analysis. The details of short-term assignments were purposefully left open for later specification in annual work plans.

All technical assistance personnel were expected to be on-the-job trainers of their counterparts. In addition ASPAP was to send four SESA staff to the U.S. for masters degrees in agricultural economics, statistics and computer science. Further, there would be 12 person-months of short-term international and in-country training. The Project Agreement later raised the amount to 15 person-months.

SESA also expected to receive 8 vehicles, 20 motorcycles, survey equipment, and office furniture along with computers and software to complement what it had obtained under ASAP. The construction component was limited to an extension of SESA's existing quarters at a total cost originally estimated at around \$90,000. The Project Agreement specified what the PP did not: that USAID would play for "SESA-sponsored seminars which will present SESA's survey and analytical results to GOR possibly makers and other interested parties." [ProAg, Annex 1, 4]

The Rwandan Government's counterpart contribution to the project was to be made in the form of Rwandan staff and payment of an increasing portion of "local costs," defined to include "such items as fuel, vehicle and computer maintenance, utilities and printing." [ProAg, Annex 1, 7] USAID's contribution to these costs was to be more limited than under ASAP and progressively phased down over the life of the project. USAID was prepared to pay for 100% of SESA's "local cost" expenditures in the first year, but the GOR's contribution was expected to rise to an 80% share by the fifth year of the project. The GOR was to pay the salaries of six professional staff at SESA, approximately 77 field staff, and support staff at headquarters. [ProAg, Annex 1, 5]

#### <u>MINIPLAN</u>

At MINIPLAN, the PP expected the project to continue support for the national household budget and consumption survey (ENBC) and to become involved in new surveys on enterprises, the informal sector and employment. The Project Agreement focused more on the rural economy, specifying the rural part of the ENBC and rural employment while omitting mention of enterprises. There were to be "up to" three years of long-term technical assistance and about 12 person-months of short term assistance. Under the training component, MINIPLAN was to send two staff members to the U.S. for masters degrees in economics, computer science, research methods or statistics. The ministry would also receive up to 15 months of short-term international and in-country training.

Whereas the PP specified that MINIPLAN would be granted four vehicles, several microcomputers, software and a photocopier, the Project Agreement was more guarded, as it was on other commitments, stating only that USAID-provided commodities would "include approximately four vehicles, computers and software." [ProAg, Annex 1, 4] The GOR's contribution at MINIPLAN was to take the form of the equivalent of approximately 3.5 full-time professionals, 19 full-time field staff and nine support staff. The ministry's contribution to local costs was on the same increasing scale as SESA's, rising from zero to 80% over five years.

#### **MINIFINECO**

For the project component at the Ministry of Finance and Economy (MINIFINECO), the PP suggested activity on "a number of key policy studies," mentioning the impact of a devaluation of the Rwandan franc, conditions in the world coffee market and an input-output model of the economy. The Project Agreement speaks in less precise terms of "surveys and policy analysis on priority

concerns for the rural economy." [ProAg, Annex 1, 5] Rather than three-years of a long-term economics advisor, whom the PP suggested might be shared with MINIPLAN, the ProAg limited technical assistance to 12 person-months of short-term help. Commodities were to take the form of two vehicles, computers and software. In addition, MINIFINECO would get two masters degrees in economics, research methods or statistics, along with 20 person-months of short-term international and in-country training. As was the case with MINAGRI and MINIPLAN, USAID would pay for seminars to present research results to policy makers.

MINIFINECO was asked to pay the salaries of approximately two professionals, 10 field staff and four support staff. Unlike the other two units, MINIFINECO would have no progressive assumption of local costs, being obliged to pay 86% of local costs in years two through five of the project.

In sum, the ProAg stated that the USAID grant was expected to finance:

- o approximately 16 person-years of long-term technical assistance (up to six advisors), although the individual units were only expecting 13 person-years (SESA 10 and MINIPLAN 3)
- o approximately 40 person-months of short-term technical assistance (STTA): SESA 16, MINIPLAN 12 and MINIFINECO 12
- o 8 masters degrees (SESA 4, MINIPLAN 2 and MINIFINECO 2)
- o approximately 50 person-months of short-term international and in-country training (SESA 15, MINIPLAN 15 and MINIFINECO 20)
- o up to 8 passenger and 6 four-wheel drive vehicles (SESA 8, MINIPLAN 4 and MINIFINECO 2)
- o 20 motorcycles (SESA)
- o computer hardware and software
- o the FRw equivalent of \$900,000 in local costs
- o construction of a \$100,000 addition to SESA's headquarters

The ProAg presented the project budget with the following breakdown.

	<u>U\$AID</u>	<u>GOR</u>	<u>Total</u>
Institutional Contract	\$4,750		\$4,750
Technical Services	250	1,600	1,850
Construction	100		100
Commodities	1,000		1,000
Local costs	900	1,500	2,400
Total	\$7,000	\$3,100	\$10,100

The institutional contract was subdivided in turn into the following categories.

Technical assistance	\$3,350
Training	1,025
Commodities	375
Total	\$4,750

In the project's first year, which overlapped the final year of ASAP, the Project Technical Group modified the technical assistance component rather drastically, cutting the amount of long-term TA to seven years (84 person-months) from 16 and increasing the amount of short-term TA from 40 person-months to 112.

The modified plan for technical assistance took shape as shown in Table 1.

TABLE 1
MODIFIED TECHNICAL ASSISTANCE PLAN

	SESA	PLAN	FINECO	Total
Long-term (pm)				
Ag. economist Economist	48	36		48 36
Total long-term TA	48	36		84
Short-term (pm)				
Computer programmer Survey specialist Social scientist Other consultants	6 12 12 58	10 2	2 10	18 12 12 70
Total STTA (pm)	88	12	12	112

In its first year, from October 1986 to September 1987, ASPAP project activity was limited to meetings of the PTG, to the selection of a contractor and to the awarding of a contract. While SESA (and to a lesser extent MINIPLAN) were able to proceed by using the last of ASAP funds, MINIFINECO received no support in the first year.

<sup>&</sup>lt;sup>3</sup>Preparation of an RFP took considerable time but the choice of a contractor and award of the contract were accomplished very rapidly.

#### **Contract Award**

Development Alternatives Inc. of Washington, DC, referred to as the Contractor in this report, was awarded a contract for \$3,916,425 on 14 July 1987. It took effect on 1 August 1987 for a period of four years. The contract amount was some \$834,000 below the illustrative amount contained in the ProAg, but an amendment has added \$597,000 to cover the cost of additional short-term TA. Another \$237,000 may be required because of higher-than-budgeted STTA travel costs, including more frequent STTA travel. An amendment for this amount would bring the contract to the full \$4,750,000 originally budgeted.

The contract specified that the Contractor was to provide Dr. Gregory Lassiter, an agricultural economist, for 48 months as long-term advisor to SESA and concurrently as "Contractor's Representative," the title preferred by the GOR to "team leader" or "chief of party." Indeed, the contract states that "there will be no team leader or coordinator under the project since all technical assistance will be supervised and coordinated by the participating agencies and the PTG." (Contract, 14) The document also specified that the Contractor would provide a then-unidentified economist as long-term advisor at MINIPLAN for 36 months. The individual later selected for this position was Dr. James Ansoanuur, an agricultural economist.

In the short-term ranks, the Contractor was for a period of 18 months to provide the services of James Otto, a computer programmer who had worked at both SESA and MINIPLAN under the ASAP project. Otto was to split his assignment into several periodic visits of one to three months each. In addition there were to be 12 pm of a social scientist, in stays of one to three months, and seven months of undesignated STTA. Dr. Thomas Zalla, an agricultural economist, was later selected as the social scientist.

The remainder of the short-term technical assistance contained in the original DAI contract (25 pm) was to come from a subcontractor, Michigan State University. Dr. Dan Clay, a rural sociologist on the MSU faculty who had worked on ASAP when at the Bureau of the Census, was designated as survey specialist for 12 pm of short-term work, split into one to three month trips. Dr. Clay was also expected to spend three months per year while on campus as "Training Coordinator." This included planning of participant training, selection of staff for training and selection of institutions to receive them. Thirteen months of Michigan State's STTA allotment were unprogrammed.

To bring STTA to 112 person months, it was necessary to amend the contract by adding 50 pm. This was accomplished in November 1988 after about five months' delay attributable to the Regional Contracts Office in Nairobi, but the amendment incorrectly specified the new STTA total as 83 person-months rather than 112 and failed to break the amendment amount (\$597,351) down into budget categories. Rectification has been requested. The Contractor's STTA responsibilities now appear as follows.

Computer programmer (Otto)	18	pm
Social scientist (Zalia)	12	•
Other STTA	7	
Other STTA (amendment)	50	
Survey specialist (MSU/Clay)	12	
Other MSU STTA	13	
Total	112	pm

<sup>&</sup>lt;sup>4</sup>These assumptions were developed by Dr. Gregory Lassiter, ASPAP long-term agricultural economist at SESA and DAI contractor representative.

The duties of the long-term agricultural economist at SESA, as stated in the contract, focused on assisting both SESA and the other participating agencies in planning and undertaking surveys and special studies, in organizing workshops and seminars, in preparing and implementing annual work plans, in drafting scopes of work for STTA, and in scheduling STTA assignments. The advisor was expected to help train SESA staff on the job. There was no mention, however, of other administrative duties.

Under the contract, the responsibility for masters degree training and for 25 person-months of short-term international training was given to the Contractor. This was in addition to helping to arrange in-country workshops and seminars. Commodity procurement not to exceed \$250,000 was included.

Left undecided was the matter of aerial photographs. The contract carried an unbudgeted option requiring the Contractor to arrange for aerial coverage of Rwanda if it was decided through the work plan process to proceed with this expenditure.

#### IV. PROJECT IMPLEMENTATION SUMMARY

In most respects the ASPAP project is a very good one. The paragraphs below appear to concentrate on some unresolved issues and on a few problems. This attention to less-than-ideal performance should not obscure the tremendous gains that have been made since the inception of the first agricultural statistics project. The value of careful, well-conceived, properly executed research has been demonstrated in Rwanda. In the Rwandan Government there is evident receptivity to the lessons to be learned from it. USAID and the staff of the two projects, Rwandan and American, can take considerable credit for what they have accomplished.

The easier part may be over, however. Future progress is going to be slower and more difficult. The challenge is to identify what kinds of analysis are needed, to do the job well, and to present the results in such a way that the analysis can "speak for itself," as a Malagasy Minister of Agriculture recently said, à propos of a study of rice policy that led to major reforms in his country.

#### A. Validity of Project Purpose and Assumptions

# **Purpose**

The project purpose, as stated in the Project Grant Agreement, can be broken down into two components:

- 1. "to improve policy formulation for the rural economy"
- "by improving the quality and increasing the quantity of the information base from which policy is formulated and by strengthening the institutions responsible for provision of such information."

In assessing the validity of the project purpose, we address each component separately.

## What Kind of Policy Change?

All seven end-of-project status objectives (listed in section III) are targeted toward the purpose of improving policy formulation for the rural economy. They remain valid. However, as much as the word policy was cited in the PP, the document provided little guidance as to what kind of policy change it expected and desired. Annex E.4 of the PP contains what is called an "illustrative list of

policy areas of concern." The list was supposed to point out "the key areas of Rwandan agricultural policy most likely needing continued attention and possible reform over the next five years...." [PP, E.4, 6] There are 20 items. Four of them were singled out as being the strongest candidates for ASPAP attention at the outset of the project. These were:

o Pricing policy

<u> - E</u>

- o Marketing policy
- o Small farm production systems, water management, land use
- o Cross-border trade in agricultural commodities

The third of these four priority items seems slightly misplaced. It was intended to emphasize studies of smallholder production systems with a view to removing constraints and in particular to designing feasible interventions to improve water management. This is not policy in the sense that it does not involve biases against agriculture or economic distortions or incentives that lead to an inefficient allocation of resources. Such studies could, of course, point the way to an improved strategy for the development of smallholder agriculture and could reveal policy options. Other items in the list of 20 clearly deal with sector management rather than policy.

What is lacking from the PP is any sense of the policy climate in which ASPAP is expected to operate, any indication of what current policies may be working against increases in agricultural production and trade. The annex in question makes the statement that

"MINAGRI must not accept the macroeconomic environment as a given and leave such things as the foreign (sic) exchange rate, the structure and level of tariffs and other trade restrictions, the interest rate structure, minimum wage rates and domestic tax levels uncritically within the purview of other ministries." [PP, E.4, 8]

These are indeed policy issues, but the reader is left to wonder how Rwanda's 1986 policies were iil-advised and inappropriate, if indeed they were, or whether the PP was simply advising MINAGRI and SESA to be prepared to speak up if these policies became misaligned. At this writing, it is apparent to many observers and policy analysts that the Rwandan franc (FRw) is significantly overvalued. This being the case, the current policy can be expected to have a number of negative effects on the sector, depressing the production of both exports and import substitutes and encouraging the production of nontradables. This provides a clear opening for policy-oriented research and analysis. The extent to which SESA and its counterparts in the other two ministries have seized this and similar opportunities will be discussed in section V.

In essence, ASPAP appears to give so much emphasis to policy, not because the project designers had any clear notion of the strengths and weaknesses of Rwanda's macro and sectoral policies in 1986, but because "policy" had become a fashionable buzzword by then and it seemed only logical to proceed from data collection and analysis to using the results for informing policy decisions.

It is hard to quibble with the logical progression, but in the case of ASPAP, those who are responsible for implementing and evaluating the project would have benefited from a clearer exposition of what Rwanda's policy deficiencies may have been in 1986. If there were no serious biases, distortions or disincentives, then it would not be reasonable to expect ASPAP to produce any major policy change. The project may be asked to help create indigenous capacity for good policy analysis, but its actual influence on policy change in its lifetime may not be great.

#### Strengthened Information Base and Institutions

ASPAP's second purpose is to improve the quality and increase the quality of information to be used in policy formulation and to strengthen the institutions responsible for providing such

information. The five project cutputs expected by the PP all address this objective. In our view, progress towards this purpose is vital, and ASPAP is properly focused in this direction.

# The Gap

Both of ASPAP's project purposes are still valid. However, the means to bridge the gap between data analysis and policy formulation remains an open question. It is well worth noting that while the end of project status objectives (EOPS) are linked to the first purpose of improving policy formulation, all five expected outputs are related to the second purpose of improving data quality and augmenting the information base. Just how the outputs were to lead to the EOPS was not specified. Nor was the time allocated to ASPAP (5 years) sufficient to accomplish both project purposes. Narrowing the gap between data analysis and policy formulation, which is discussed further in Section Vi.C., should be ASPAP's target for the future. Realistically, however, progress towards this end will be difficult and will require more time than the two years remaining under ASPAP.

# Assumptions

<sup>1</sup> The PP's Logical Framework identifies the following assumptions for achieving the project purpose:

- 1. GOR policy makers are willing to use survey data and analyses;
- 2. Political environment for policy dialogue remains stable;
- 3. Trained GOR staff can be retained.

Here again, particularly in relation to Assumption 1, the gap between data analysis and policy formulation becomes evident. The implicit assumption in policy makers' "willingness" to use survey data and analyses is that the analyses are perceived as relevant to current policy issues. For this to be true, formal communication links between policy makers and policy analysts need to be in place. Such links are weak at best and must be developed if ASPAP is to achieve its purpose.

Assumption 2, while true, masks a more relevant implicit assumption: that specific areas of agricultural policy have been identified which require policy dialogue. As discussed earlier in this section, the PP lacks any indication of what current policies may be working against increases in agricultural production and trade.

Assumption 3 has proved problematic at MINIPLAN and MINIFINECO, due mostly to severe staff shortages. For SESA, the immediate concern is a temporary staffing gap resulting from the departure of long-term trainees for the U.S.

Several other assumptions are <u>implicit</u> in the project design and deserve attention because of their direct relevance to project success. They are discussed in detail in their proper context elsewhere in this report and are summarized below.

- 1. The services supported by ASPAP -- SESA, MINIPLAN, and MINIFINECO -- are integrated into the policy process. This is not yet true for SESA and the MINIPLAN unit. To date, both units have been the providers of data, but have not fed these data directly into policy making channels.
- 2. The PTG assures that ASPAP activities are closely related to agricultural and rural policy formulation. The PTG has not functioned as envisioned in the PP. For the most part, the PTG has met infrequently and only to discuss project resource allocation. The PTG is not answerable to any GOR body for decisions concerning research priorities.
- 3. The CIC/RD works in close collaboration with the PTG to ensure that ASPAP annual plans of work allocate project resources in a manner consistent with ASPAP goals. In practice, the CIC/RD has played no role in ASPAP implementation.

## B. Inputs and Outputs (as of 31 May 1989)

The purpose of this section is to provide a summary of inputs and outputs to date. In Table 2, Summary of ASPAP inputs, the column labeled "Original Amount" has been taken from the PP and ProAg, as described in section III above. The same section points out that the plan for technical assistance was modified by the Project Technical Group in the project's first year. The modified totals appear in the column labeled "Revised Amount." Under "Actual Amount" are entered figures for project status on 31 May 1989.

Appendix B contains detailed tables on short-term technical assistance and on both long- and short-term training. The tables were compiled by the Contractor's Representative for his own reports and have kindly been provided by him.

The project's outputs were expected by the PP to be five in number.

- 1. Rwandan staff trained in data collection and analysis, able to conduct surveys on policy issues and to provide decision makers with cogent analysis revealing trade-offs.
- 2. A maintainable integrated data base which can be used for analysis of the rural economy for policy makers.
- 3. Analyses and publications which respond to the needs of policy makers.
- 4. A second national agricultural survey, possibly based on area frame sampling, to be conducted in 1990 after a national census planned for 1988.
- 5. SESA being capable of providing to other government agencies and outside organizations expert consulting services in survey design, sampling, data processing and analysis. [PP, 13]

At this writing, some three years after the PP was drafted and two years and four months from the end of ASPAP, the project has made some impressive gains. At SESA it is well on the way to producing well-trained staff, a maintainable data base, pertinent analyses and publications, and expert consulting services. Accomplishments to date at the other two units have been much more modest due to serious shortages of counterpart staff. The matter of a second national agricultural survey is most since the national census planned for 1988 has not been carried out and in any case

TABLE 2 SUMMARY OF ASPAP INPUTS

Input	Original Amount	Revised Amount	Actual Amount	Actual as % of Revised
Long-term TA (pm) SESA PLAN	120 36	48 36	21.3 6.5	44% 18%
LTTA Total	156	84	27.8	33%
Short-term TA (pm) SESA PLAN FINECO	16 12 12	88 * 12 * 12 *	25.3 7.6 20.8	29% 63% 173%
STTA Total	40	112	53.7	48%
LT Training (pm) SESA PLAN FINECO	96 48 48	96 48 48	30 0 0	31% 0% 0%
LT Training Total	192	192	30	16%
ST Training (pm) SESA PLAN FINECO	15 15 20	15 ** 15 ** 20 **	80 11 26	533% 73% 130%
ST Training Total	50	50	125	250%
Vehicles SESA PLAN FINECO	8 4 2	8 4 2	4 2 2	.50% 50% 100%
Vehicles Total	14	14	8	57%
Motorcycles SESA	20	20	14	70%
Motorcycles Total	20	20	14	70%
Computers (\$ 000) SESA (3 PS/2) PLAN (2 PS/2) FINECO (2 PS/2)	62 51 33	62 51 33	29 41 18	47% 80% 55%
Computers Total	146	146	88	60%
Construction (\$ 000)	100	100	77 ***	77% (100%***)

Notes:

<sup>•</sup> The STTA amounts for each unit have been revised by the Contractor as a result of MINIFINECO's actual use of more than its allotted amount. The current breakdown is: SESA 80.1, PLAN 11.0 and FINECO 20.9.

<sup>\*\*</sup> The short-term training totals have not been officially revised, but the Contractor has provided short-term training in excess of allotments for SESA and FINECO.

<sup>\*\*\*</sup> Construction was completed below budget.

recent improvements in SESA's methodology now allow it to cover annually an even bigger sample than that of the 1984 survey. Progress toward each output at the three units is discussed in detail in section V.A.

Most of these outputs are supposed to be aimed directly at policy makers. The extent to which they are reaching their target and being used as the PP intended is difficult to assess, but it is clear that much remains to be done. The question will be addressed in section VI.

# C. Budget: Commitments and Expenditures as of 31 March 1989

The USAID mission's Comprehensive Pipeline Report showed the following amounts had been obligated, committed and disbursed as of 31 March 1989 (in \$ 000). The obligated amounts are identical to those found in the ProAg.

Category	<b>Obligated</b>	Committed	Disbursed
Institutional Contract	\$4,750	\$1,850	\$ 986
Technical Services	250	37	28
Construction*	100	77	77
Commodities/local support	1,000	489	300
Local costs	900	400	258
Total	\$7,000	\$2,853	\$1,648

Note: \* Office furniture for the new wing (\$42,000 obligated; \$36,000 committed and disbursed) has been shifted from construction to commodities. In the original budget there was no provision for this furniture, either under construction or under commodities.

For the institutional contract, the Contractors's records show that the following amounts had been budgeted and expended as of 30 April 1989 (in \$ 000).

Category	Budget	Expended
DAI technical assistance	\$1,291	\$ 476
DAI training	253	107
MSU subcontract	1,154	208
Pittsburgh subcontract <sup>5</sup>	120	0
Equipment & supplies	250	89
Other	848	336
Total	\$3,916	<b>\$</b> 1,216

<sup>&</sup>lt;sup>5</sup>The training subcontract with the University of Pittsburgh has been approved by USAID but has not been signed by the university, and there is a question whether it will be. The funds may be reallocated elsewhere.

The Contractor's expenditure figures show the usual lag between the time that an activity begins and when actual expenditures are reflected in the accounts. The lag is accentuated by a delay in Michigan State University's reporting of its first quarter 1989 expenditures. Even so, the rate of expenditure overall is only 31% of the original contract amount with 21 out of 48 months (44% of the contract period) having elapsed. Since the contract amount is expected to be raised to \$4,750,000 by amendment, actual recorded expenditure in the first 21 months was only 26% of the higher total. This apparently slow rate of expenditure may well be misleading. Both long-term technical assistance and long-term training were initiated at a slower pace than foreseer. By May 1989, for example, only two of eight Rwandans had begun their long-term training programs in the U.S. The rest of the Contractor's program is progressing according to schedule, and the components that have been behind are beginning to catch up. At this point the Contractor's Representative estimates that budgeted amounts in most categories, with the possible exception of STTA, will have been expended by the project activity completion date (PACD).

Local costs have been a matter of concern. The amounts actually expended by the Rwandan Government for local costs of the ASPAP project out of its own budget have been almost entirely limited to those for the MINIPLAN unit and the exact amounts are not known. Further investigation is needed. THE GOR has paid salaries of permanent staff for SESA but no operating costs other than utilities. The ex-MINIFINECO unit's counterpart funding in 1988 was in fact drawn from the USAID-supported PRIME project. The amount was approximately \$90,000 and was spent by ex-MINIFINECO in its entirety.

The local cost amounts disbursed out of the USAID budget are known. The figure shown above (\$258,000) does not include expenditures in the fourth quarter of 1988, which were not reimbursed until May 1989 and hence do not appear in the April 1989 totals. USAID has reimbursed the GOR \$304,428 to date for local costs. This covers expenditures from October 1987 through December 1988. Some 34% of USAID's local cost budget was spent in the project's first 15 months (31% of its duration). Since the USAID contribution was supposed to diminish each year, the rate of expenditure to date is well within bounds. The concern is focused on the remainder of the project's life. The GOR has not refused to make good on its own contribution but has been hampered by a long delay in approval of the 1989 Development Budget. The Government's current budgetary difficulties do raise a question about the extent to which it will be able to contribute to local costs. As one of the principal issues in the evaluation, the matter is discussed in detail in section V.C.2. below.

# V. PROJECT STATUS

#### A. Progress Toward Outputs

The PP specified five outputs expected of ASPAP. We address each output separately in the following paragraphs.

<sup>&</sup>lt;sup>6</sup>The DAI contract is scheduled to terminate two months short of the PACD, which is 30 September 1991, since the four-year contract began on 1 August 1987. Since Contractor services appear to be needed up to the PACD, the contract should be extended to be co-terminus with the PACD, in which case it would be for 50 rather than 48 months.

Output 1. Staff trained in survey design, data collection, processing, and analysis.

SESA

By the time ASPAP began in 1987, SESA staff already had considerable experience in survey design, data collection and analysis through their participation in the 1984 National Agricultural Survey (ENA) and subsequent seasonal surveys. ASPAP's major contribution has been to provide technical assistants to work with SESA staff to monitor and evaluate SESA's survey methodology, identify problem areas, seek solutions, and institutionalize desired changes. TAs and counterparts jointly design new studies and systematically improve the established methodology. The results of this collaborative approach to on-the-job training can be seen in SESA's recurrent agricultural statistics program as well as its special studies.

Recurrent agricultural statistics. SESA's effort to "harmonize" the SESA and MINAGRI data collection systems has been a key catalyst to scrutinizing their own procedures. In searching for simplified data collection techniques suitable for use by monagris, SESA has tested and, where possible, adopted a number of important data collection innovations.

The 1984 ENA was a mammoth undertaking; it yielded crop production and acreage estimates on 12 crops at the national and prefectoral levels and for 12 agro-ecological zones and five geographic regions. Estimates were based on a national sample of 2100 households surveyed by 150 enumerators and 20 supervisors. In addition, information on household demographics and livestock production was collected and analyzed. Most of the analysis of ENA data was completed during phase 1 (ASAP).

In 1985, the sample was reduced to 1092 households (surveyed by 78 enumerators) to bring it more in line with available resources. As a result, the ability to estimate production by the 12 agro-ecological zones was lost and the number of crops followed was decreased from 12 to 8. From these data, SESA has produced national and prefectoral statistics. A bi-annual livestock inventory based on the national sample has also been taken as have seasonal forecasts of expected harvest.

Data collection using the same techniques continued until early 1988, by which time ASPAP was established and the question of harmonization was first addressed. A technical committee was formed to devise new strategies for improving and streamlining the data collection system. These innovations which were eventually incorporated into the 1989A cropping season survey on a trial basis were succinctly summarized in the ASPAP/DAI Semi-Annual Report No.3. The most important elements are reproduced below:

more efficient sampling method: From 1985-88, each enumerator followed 14 households — two clusters of 7 households selected from the District Census list in such a way that households within a cluster were close neighbors farming very similar land and often belonging to the same family. The new sample was selected by increasing the number of clusters to 4 per enumerator and increasing the skip pattern (the number of households skipped on the list between draws of subsequent households within the same cluster) to every

<sup>&</sup>lt;sup>7</sup> "Harmonization" is the term used by ASPAP in documents and discussions referring to the goal of a unified system within MINAGRI for collecting agricultural production statistics. Harmonization is addressed in detail in section V.C.3.

<sup>&</sup>lt;sup>8</sup>MINAGRi's extension agents posted to each sector.

fourth household. This should increase statistical precision and sampling efficiency by reducing standard errors.

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Another proposal considered by ASPAP to improve sampling coverage is low-altitude as a photography. However, the PTG decided not to include the proposal in the 1989 workplan because it was not convinced of its appropriateness for local conditions. (Aerial photography is discussed in detail in Section V.C.3.).

<u>Increased workload</u>: The consensus at that time among SESA field supervisors, central office staff, and enumerators themselves was that enumerators were underemployed. To make more efficient use of time, each enumerator now collects weekly production data in 16 households (known as the "intensive" sample, totalling 1248 households). In addition, each follows 16 households ("extensive" sample of another 1248 households) to be interviewed bi-monthly for special studies. SESA's entire sample now totals 2496 households, but still uses the same 78 enumerators and 10 supervisors. Furthermore, the crops covered in the survey were increased from 8 to 16.

more effective field sampling and measurement: In contrast to the previous method of measuring 4-5 (out of an average of 14) fields for each sample household, enumerators now measure all fields for half of the households in the intensive sample. This new system allows SESA to calculate crop yields at the individual household level and to classify and compare households based on productivity and cropping patterns. The previous system permitted such comparisons only at more aggregated regional levels. Over the next two seasons, SESA plans to measure all fields of the entire intensive sample.

SESA also introduced programmable calculators to compute field areas and closure errors. This has virtually eliminated data processing delays since areas are immediately calculated at the prefecture offices.

more accurate crop density data: Rather than use direct measure methods (density squares, crop counts, etc.), SESA introduced a simple subjective rating of the relative importance of different crops in a given field. Preliminary tests of the new method showed a remarkable convergence of enumerator opinions on ratings of selected fields. This method will permit better estimates of crop yields for fields containing crop associations and better categorization of fields by the relative importance of different crops present.

test of more efficient production measures: Enumerators' most time consuming activity is weekly visits to each household in the intensive sample to collect crop production data. Enumerators ask farmers to measure the week's production in 12 liter buckets graduated into quarters. SESA is testing two different data collection techniques, both requiring farmers to quantify the harvest based on end-of-season recall and allowing the use of local units of measure. The results of these tests were being analyzed at the time of this writing.

New survey instruments are now being developed for administration to the intensive sample households. A series of questionnaires on household income (crop transactions, non-farm income, livestock transactions, and beer production income) are nearly ready for testing and should be fielded during the 1990A season which begins in October 1989.

In developing and testing the data collection innovations discussed above, the skills of SESA's staff have improved progressively. Under ASPAP, SESA's staff have also gained new microcomputer skills, most notably in using SPSS. Short-term training courses have been extremely successful since practical experience with SPSS directly followed the formal training.

Special studies SESA has placed increasing emphasis on special studies focusing on discrete policy relevant topics. Through the collaborative efforts of SESA staff and ASPAP technical assistants, numerous studies have been completed. Among them are studies on non-farm strategies, sorghum production and marketing, lowland (marais) land use, and fertilizer use. The World Bank commissioned a major study on land tenure and fragmentation. Although ASPAP per se was not directly involved in the study, the benefits of previous staff interaction with ASPAP TAs were visible in staff performance.

As with the recurrent agricultural statistics program, special studies have served as training vehicles for SESA staff. For each study, TAs and counterparts collaborate on the study design, develop and field test questionnaires, formulate an analysis plan, write the report, and, in some cases, present the results at a seminar. Through this process, analysts broaden their general skills and sharpen their mastery of SPSS.

#### **MINIPLAN**

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Very little progress, if any, has been made at MINIPLAN in the area of staff training. This is due largely to a severe shortage of qualified personnel and lack of counterparts for ASPAP-funded technical assistants. This state of affairs is not new. All four technical assistants financed since 1984 under the PRIME, ASAP, and ASPAP projects to work on the ENBC data sets have worked without counterparts. We see this as a major constraint to ASPAP's effective collaboration with MINIPLAN and discuss the issue in detail in Section V.C.5. below.

#### **MINIFINECO**

A major study on communal recurrent cost financing was undertaken with ASPAP support. In pursuit of GOR policy of decentralization, the study examined the recurrent costs of communal social services and infrastructure, and considered strategies for evaluating alternative mechanisms for communal financing. Four sectors were evaluated: health facilities, schools, roads, and water delivery.

The questionnaires were hastily designed and fielded with little concern for staff training. More on-the-job training opportunities were seized during the analysis phase, although only two of the six university-trained staff called for in the study plan were ultimately assigned to the task. The ASPAP technical assistant spent considerable time progressively training the analysis teams assigned to each of the four sectors. He first developed his data analysis strategy for the health sector data, then met weekly with the other sector teams to lead them through the analysis process.

Output 2. Established/maintainable integrated data base useful for policy analysis.

#### **SFSA**

At ASPAP's incepilon, SESA had one Macintosh, one Apple, three IBM-XT, and three AT microcomputers. Since then, ASPAP expanded SESA's data processing facility with the purchase of 3 PC/2s and printers. All data have been transformed to SPSS format and are stored in well-documented files, making the data readily accessible to potential users.

Each questionnaire fielded under a special study or the recurrent agricultural statistics program is filed separately on diskettes. All records are marked with the household ID code, thus allowing different data sets to be linked for customized analysis.

Researchers from other projects are already making use of SESA's data base. To date, topics have been mostly related to the geographic areas of concern to those projects. In working with other researchers, SESA analysts have benefited by gaining new experience with new applications of SPSS.

#### MINIPLAN

ASPAP support at MINIPLAN has been primarily in the form of technical assistance to analyze data from the 1983 Enquête Nailonale Budget-Consommation (ENBC). To date, the rural data set is filled in FOCUS format, although a copy of part of these data are filled at SESA in SPSS format. The urban data set is not yet in a readily usable form.

#### **MINIFINECO**

Data from the communal recurrent cost survey have been processed and stored in dBase III. Much of the analysis was completed using Lotus 1-2-3. The study has just been completed, so organization and documentation of the data files are still underway.

Output 3. Analyses and publications responding to policy makers' needs.

#### **SESA**

The results of a number of substantive studies have been published by SESA (see Appendix C). Some reports are the result of commissioned studies. Others were prepared for SESA's major agricultural policy seminar held in April 1989.

Circulation of SESA's reports has not been given sufficient priority. Recently, SESA developed an annotated publications list intended for extended distribution. This should stimulate a wider interest in SESA's documents, but follow-up with potential users and a distribution system for SESA publications will also be required to expand SESA's readership.

We find it particularly startling that no formal mechanism has yet been established to disseminate the recurrent agricultural production data described above (Section V.A.1.). Except for one data table per season (total production per crop by prefecture) presented in interministerial memos, these data are made available to potential users only when requested. Very recently, ASPAP technical assistants and a SESA analyst collaborated on a working paper entitled "Production Trends and Their Impact on 1-ood Security" (SESA Working Paper No. DT.17 — see Appendix C). Presented at an April 1989 seminar on agricultural policy issues, the paper synthesizes some of the production data of the last five years. However, like the seasonal statistics, this paper also was not widely circulated. Such limited exploitation of these recurrent agricultural production statistics is not at all in line with the tremendous human and computer resources allocated to collecting and processing the data. Our recommendations concerning SESA publications are found in section II.

#### **MINIPLAN**

Under ASPAP, two volumes have been published based on ENBC analyses (use and sources of revenue of rural households, and rural food consumption). These follow two volumes on sampling methodology and preliminary household budgets completed with PRIME and ASAP support. Concerning the urban data, one volume on sampling methodology and data collection and a second containing partial results from selected urban areas have been completed.

#### MINIFINECO

As of this writing, data analysis for the commune recurrent cost study is nearly complete and reports are being compiled. Two seminars are being organized to present the findings to selected GOR officials and to the heads of Rwanda's 141 rural communes.

#### Output 4. Second national agricultural survey.

ASPAP project designers envisaged a second national agricultural survey to be conducted in 1989, five years after the first survey. This activity now seems unnecessary. With an improved sampling frame, and a refined data collection and processing system, SESA now generates production statistics which are arguably of better quality than the 1984 data. Since the statistics are collected for each season, production trends can be monitored more accurately than would be possible with surveys conducted every five years. Although the capacity to generate production estimates for the 12 agro-ecological zones was lost, the retention of national and prefectoral estimates plus estimates for five geographic regions seems to be a good compromise in light of the prohibitive cost of annually following all the households in the 1984 sample. To cut costs, SESA scaled down its field staff to half the number used during the 1984 ENA. SESA hired 150 enumerators and 20 supervisors for the 1984 survey, but laid off half of them once the survey was completed. The remaining staff were retained to collect annual statistics. This strategy has resulted in a core field staff now quite experienced in collecting both recurrent production data and one-time data related to special studies.

## Output 5. SESA capacity to provide statistical consulting services to data users.

SESA's capacity to field special studies has been recently recognized, and, as more studies are commissioned, SESA's reputation is enhanced. Most recently, the World Bank commissioned a major study on land tenure and fragmentation. Other studies include the EEC-funded fertilizer study and a planned coffee production study, to be financed by the coffee marketing board.

One pitfall to placing too much emphasis on consulting services should be exposed here. To date, SESA has been willing to take on widely diverse research topics at the request of commissioning agencies. The danger is that SESA's research may ultimately be driven more by donor agendas (and SESA's financial needs) rather than by rational near- and long-term research plans developed by SESA in collaboration with data users. Our recommendation on setting SESA's research priorities is found in section II.

#### B. Management

#### 1. <u>USAID</u>

USAID Rwanda's management of ASPAP is vested in the Agricultural Development Office (ADO). There have been two Agricultural Development Officers since the project's inception, Paul Crawford since October 1988 and his predecessor, Michael Fuchs-Carsh. A local employee, Dr. Valens Ndoreyaho, serves as assistant ADO and has helped to supervise the ASPAP project. Andrew Sisson, who was the Project Development Officer at the USAID mission, also acted as ASPAP project officer at its inception. Dr. Ndoreyaho took over in January 1983, and Crawford assumed responsibility when he arrived in October 1988.

Both the ADO and his assistant also manage several other projects for the mission, the most important at present being the Farming Systems Research Project. There are several smaller projects and programs such as PL-480 which are being closed out. The ADO office has recently

devoted much of its time to the design of a new Natural Resource Management Project and to preparation of a Project Paper. As this project gets underway, responsibilities will be shifted within the office. In all likelihood a new local hire employee will become ASPAP project officer.

The ADO has chosen to divide responsibilities between his assistant and himself so that he deals mainly with the Contractor's Representative while his assistant is the primary USAID liaison with the Rwandan Project Director, Serge Rwamasirabo, the Director of SESA. The attention of the ADO office has recently been concentrated on the process of approving the 1989 annual work plan and on issues raised by a reimbursement request for local costs incurred in the last quarter of 1988.

Under USAID's direct control in the ASPAP budget is the "Technical Services" heading. In it are funds for two evaluations and for project management and other technical services not included in the institutional contract. The mid-term evaluation has been conducted and is the object of this report. The mission also hired an expatriate MBA who for a brief time helped track ASPAP local expenditures and procurement activities. However, she worked primarily on other projects in the mission's portfolio, including Food for Peace. The new mission director (since September 1988) and the current ADO have rightly put a stop to this practice.

The ADO office is also required to oversee the construction component and procurement which is not included in the institutional contract. Construction was limited to an extension of SESA headquarters consisting of two offices and a large conference room that can accomodate 100 people. Work was completed on the building in 1988. Local procurement has presented more of a challenge, in particular with regard to computer equipment. A waiver allowing the purchase of Japanese or European vehicles was approved along with the PP, and the local procurement of vehicles was carried out without incident. Computer purchase was also the subject of waiver in January 1987, but serious delays occurred in the submission of a purchase order to a local vendor in the March-June 1988 period.

Mission management must also be concerned with the rental and equipping of houses for the two long-term advisors since these responsibilities were purposefully left out of the institutional contract. Appropriate housing was located, rented and fully equipped for both long-term advisors before their arrival. Some housing support was also provided by the project to a Belgian advisor who worked at SESA in its formative years and agreed remain on an extra year until September 1988. His salary was paid by the Belgian government while housing, local per diem and vehicle expenses were paid by USAID. One-year's advance rent on the advisor's house came from unexpended ASAP funds, but the cost of restoring it to its original condition when he departed fell upon the ASPAP budget and proved to be quite expensive.

# 2. Contractor

There is provision in the institutional contract for home office coordination of the Contractor's project activities. At DAI headquarters this responsibility has been confided to Dr. David Wilcock, an agricultural economist, who has visited the project in the field on two occasions. Dr. Tony Barclay, DAI 'Vice-President, has also visited Rwanda to have a first-hand view of project implementation, most recently as the evaluation team was leaving. Both Wilcock and Barclay have contributed thoughtful written reports of their visits. On the campus of the subcontractor, Michigan State University, Professor Michael Weber of the Department of Agricultural Economics has devoted time

<sup>&</sup>lt;sup>9</sup>Dr. Wilcock is quite familiar with Rwanda's agricultural sector, having spent two and a half months in country in 1986 to write the sector volume of the Social and Institutional Profile.

to supervising and guiding the involvement of his institution in the project. He has made one site visit.

In Rwanda, the Contractor's representative and manager is Dr. Gregory Lassiter. The lack of emphasis in his job description on managerial responsibilities notwithstanding, Dr. Lassiter has found to his chagrin that a large portion of his time is devoted to project management rather than substantive work at SESA or training of counterparts. This should not be surprising to anyone who has observed similar projects elsewhere in Africa or acted as a project manager. What is surprising is that project designers so consistently assume that the administrative burden will be light.

The simple fact that the Contractor would be responsible for 196 person months of technical assistance, however it may be broken down between long-term and short-term assignments, assures a heavy load for the chief of party. Tilting the mix more toward short-term TA increases the burden because STTA requires far more effort in the way of preparation, logistical support, coordination with other activities and problem solving. Added to TA management is the local administration of the training component. As the person on the spot, the Contractor's representative must deal with various crises caused by delays in granting official job assignments (a prerequisite to overseas training for a candidate) and training clearances. This has proved to be a major task for ASPAP, though it should come as no surprise because ASAP had much difficulty of a similar nature.

The Contractor representative's administrative workload increased even further when he gradually assumed more day-to-day management tasks for the project as a whole. This may be attributed to the fact that he occupies the office in SESA next to that of the Rwandan Project Director and is often seen by both Rwandan counterparts and USAID staff as the best intermediary. This happened early in ASPAP. Dr. Lassiter found himself deeply involved in local procurement financed directly by USAID largely because he was being held accountable for procurement delays by Rwandan counterparts.

The administrative burden has been lightened somewhat since the Contractor hired a Rwandan administrative assistant in April 1988, but it is still heavy enough to cut seriously into the representative's availability for substantive work. In a series of three highly informative and well prepared semi-annual reports, the representative initially showed optimism that the managerial load would lighten before long, but in the latest report he has noted only slight improvement. It is unlikely that the situation will improve dramatically unless remedial action is taken.

# 3. SESA and the Project Technical Group

On the Rwandan side, project coordination and management were vested in the Project Technical Group (PTG) in certain respects. The ProAg gives to the PTG a mandate to:

- plan project activities,
- o review survey proposals,
- standardize methodologies,
- o promote collaboration in project activities,
- discuss research results,
- o organize seminars and workshops,

- o forward current analysis to policy makers, and
- o prepare annual work plans and submit them to the CIC/RD. [ProAg, p. 6]

This list places a clear emphasis on overall planning of project activity end on substantive discussion of methodologies and results. In actuality, the PTG has mot infrequently (only one informal meeting so far in 1989) and has devoted almost all of its time to the division of project resources among the three participating units. Vehicles, computers, training and local costs have taken the forefront. Local cost reimbursement has been a particularly thorny issue.

The day-to-day management and accounting for the project on the Rwandan side have been entrusted to SESA, in part because it has the largest share and in part because it alone administered the predecessor project. SESA's accountant receives requests from the other units for local purchases from the project's local cost bank account at the National Bank of Rwanda and prepares purchase orders for the SESA (also Project) Director's signature. When bills are presented by vendors, she pays them out of the account when funds are available. At the end of May 1989 funds had not been available since late 1988 except for salaries of contract staff, and a number of vendor's bills remained unpaid.

The accountant also prepares for the Director's signature the combined request for quarterly reimbursement of local costs. The request is forwarded to USAID for approval and payment. Payment is then made in the form of a check issued by the Regional Finance Center in Paris and deposited in the project account. Table 3 provides detail on amounts requested and approved for payment. By the end of May 1989, after 20 months of local cost expenditures, five vouchers had been processed, covering the 15 months for which reimbursement had been authorized.

#### C. Constraints, Problems and Unresolved Issues

#### 1. Project Management

It is difficult to avoid the conclusion that ASPAP would be an even better project and would progress with fewer hitches if USAID Rwanda were able to pay greater attention to several details of project management. This is not to say that all of the project's management problems can be laid at the door of the local mission. The obligation to use contracting and other management services located at the regional office in Nairobi is a clear impediment to good project implementation.

A striking case in point is the first amendment to the Institutional Contract with Development Alternatives, Inc. The original contract with DAI called for only 62 person months of STTA. This was clearly insufficient because the PTG had reduced the number of long-term technical assistance personnel and asked for an increase in STTA to 112 person-months. A PIO/T authorizing negotiation of an amendment to make such an increase was sent to Nairobi in June 1988. Months passed. The regional contracting officer finally issued an amendment in November 1988, but it was inaccurate in the number of person-months (83 instead of 112) and it provided no breakdown into line items of the additional funds provided by the amendment. These deficiencies had not been corrected by late March 1989, as DAI pointed out in a letter to the Regional Contracting Officer. At the time of the evaluation no rectification had been issued to the best of our knowledge.

Sending vouchers through Nairobi for approval added considerable delay. Fortunately, this bottleneck has been removed and all but pay vouchers can now be submitted directly to Paris for payment.

TABLE 3. Local Cost Expenditures and Reimbursements, October 1987 - May 1989 (in Rwandan Francs)

Budget Item	4 QTR 87	L QTR 88	2 QTR 88	3 QTR 88	4 QTR 88	TOTAL	Jan May
			·	•		198C	1989
Logistics (Vehicles)							
Fuel	334,053	297,254	281,115	656,564	407,392	1,642,325	476,167
Maintenance & repair	402,905	415,390	192,062	217,803	418,933	1,244,188	572,732
•				•			
Insurance, rental, plate:		91,600	98,736	459,344	000.000	649,880	93,806
Sub-total Logistics	700,153	804,444	571,913	1,333,711	826,325	3,536,393	1,142,705
• • • •							
Printing							•
Questionnaires	0	0	0	0	133,188	133,188	0
Publications	0	0	0	174,600	0	174,600	514 <b>,9</b> 66
Sub-Total Printing	0	0	0	174,600	133,186	307,788	514, <del>96</del> 6
					,		
Personnel							
Salaries of contractors	759,053	1,144,494	1,172,833	1,215,127	1,039,905	4,572,359	2,359,550
Salary supplements	263,800	412,000	351,064	345,374	556,508	1,664,946	0
Mileage allowances	339,195	169,285	8,530	166,996	406,420	751,231	860,000
Supervisory missions	44,500	72,100	185,300	3,012,685	560,074	3,810,159	390,982
*Medical care	30,990	14,195	42,423	0	0	56,618	28,405
"Social security	93,504	20,239	80,023	100,563	77,252	278,077	0
*Professional taxes				_			0
	91,935	0	0	1 010 715	0	0	•
Sub-Total Personnel	1,622,977	1,832,313	1,820,173	4,840,745	2,640,159	11,133,390	3,638,937
Training							
In-country sesinars	٥	٨	•	•	•	0	229,826
	0	0	0	0	0	•	•
Survey and other staff	0	0	0	95,000	284,800	379,800	0
Sub-Total Training	0	0	0	95,000	284,800	379,800	229,826
Equipment & Supplies							
Office equip. & supplies	208,953	694,393	851,454	1,281,769	2,241,482	5,069,098	257,607
			•				•
*Repair & amintenance	22,215	292,394	653,461	46,956	189,641	1,182,452	634,081
Sub-Total E & S	231,168	986,787	1,504,915	1,328,725	2,431,123	6,251,550	891,688
Generator	110,700	0	0	0	0	0.	0
VS.10100.		•	•	•	•	•	•
Other							
*Utilities	55,990	22,210	0	0	0	22,210	0
*Post, tel & tel.	13,223	13,165	29,775	36,075	50,400	129,415	81,205
*Electrical cable	150,000	0	20,110	0	0	0	0
*Building repair	0	0	Ö	-	Ŏ	145,074	73,400
	-	•	_	145,074	•		
*Other services	21,250	152,532	92,989	250	0	245,771	12,000
*MINIFINECO surveys	0	0	0	778,536	. 0	778,536	0
Sub-Total Other	240,463	187,907	122,764	959,935	50,400	1,321,006	166,605
TOTAL FOR QUARTER	2,985,461	3,811,451	4,019,765	8,732,716	6,365,995	22,929,927	6,584,727
B1 - 11 1-11							
Disallowances/other **	0	0	0	9,000	2,706,B07		
Total reimbursed by USAID	2,985,461	3,811,451	4,019,765	8,741,716	3,659,188	20,232,120	
TOTALS IN \$	40,133	51,064	51.364	115,235	46,632	264,295	
- :	Ruf 74.39=81	74.64	78.26	75.86	78.47	76.55	
:		•••••			•	, 2, 1, 2	
Date submitted by ASPAP	1/23/88	5/11/88	8/17/89	11/09/99	1/23/89		6/06/89
Date certified by USAID	2/04/88	5/31/88	9/12/88	11/21/88	5/11/89		
•							

SOURCES: ASPAP reimbursement requests and Standard Form 1034s.

MOTES: " This line item did not appear in the authorizing PIL "" The amount in the 3rd QTR was a mistake in addition; in the 4th QTR the amount was for disallowances.

The Kigali mission itself caused delay on occasion. The two most significant examples of this have been the delay in approving the 1989 work plan, which is discussed below, and the length of time it took for the mission procurement office to buy computer equipment locally for the GOR project units. The Contractor's representative gave to the mission procurement office on 22 March 1988 a detailed listing of all of the items of computer hardware, software and supplies which were to be procured. Unit prices, discounts, and conditions were all included. In effect, the difficult work had been done. The purchase order(s) were not delivered to the local vendor, however, until June 1988, and initial deliveries did not occur until September 1988. The principal items, seven IBM PS/2 microcomputers, were not delivered until 8 November 1988, seven and one-half months after the specifications were drawn.

The ADO office has encountered difficulty in keeping close track of project implementation actions and of project expenditures. No doubt this is in large part caused by the heavy demands placed on the officers' time by other on-going projects and by the need to develop new ones.

Nonetheless, part of it can be attributed to their lack of easy access to vital information. The simple and timely data that they need appear to be unavailable. In the case of ASPAP, the project officer has been working on a Lotus-123 spreadsheet to keep track of disbursements, but it is less useful than the expenditure of time on it warrants.

To monitor the project properly, the ADO office needs to be better informed of the status of the PIOs that have been issued. Without a grasp of how commitments and disbursements have been progressing, without a ready familiarity with the tools of the trade (PIOs, PILs, contracts and purchase orders), project officers can be only partially effective.

The ADO office divides its responsibilities so that the American officer deals primarily with the Contractor while the Rwandan officer handles relationships with the PTG and Rwandan counterparts. At first glace this may be sensible because of each one's greater ease with the assigned responsibilities. It has the effect, however, of keeping the American officer distant from the nitty-gritty of project administrative detail, which he should master to be able to keep the project moving ahead expeditiously. Otherwise, problems will surface and fester unresolved for lack of high level attention. The division of responsibilities also puts the Rwandan officer in the sometimes difficult position of interpreting USAID regulations and of being the bearer of bad tidings to his countrymen.

If the workload of the ADO office is going to continue to be as heavy as it has been in the recent past, more help is needed to stay on top of projects. Someone should be responsible for tracking project accounts and maintaining up-to-date tables of inputs and outputs, of commitments and disbursements, and of projected expenditures through the remainder of project life. At the same time, this individual should keep a close eye on local cost expenditures in order to avoid the problems observed in the past. We understand that ADO has recruited one new local hire and is seeking another.

It is also necessary to reduce the administrative workload on the Contractor's representative if he is going to use his substantive skills more effectively in the next two years. His administrative responsibilities should be clearly limited to the implementation of the institutional contract. He should not be involved, other than as a member of the PTG, in any routine matters of project implementation that are outside of the contract. In the process of overseeing contract implementation, however, the care and feeding of STTA will always be very time-consuming. This has been the experience of many similar projects.

It may be worthwhile for the Contractor to consider hiring locally another individual, perhaps on a part-time basis and perhaps an American, who could concentrate on preparing for visits by STTA staff and on attending to their logistical needs in Rwanda.

#### 2. Local Costs

The kind of difficulty that tends to arise when project officers are unable to give sufficient attention to detail is illustrated by the case of local cost reimbursements. The ProAg budget contains \$900,000 to be used for the payment of local cost expenditures incurred by the three participating units. Annual budgets for local costs are to be presented with the annual work plans and funds are to be authorized by Project Implementation Letters (PILs) based on the work plans. At the same time, the GOR is expected to pay from its own budget up to \$1,500,000 in local costs to support ASPAP.

The PP budget (Annex F) used a figure of \$733,000 as the USAID contribution to local costs, but also allocated funds for a 5% rate of inflation and for 5% contingency. If one adjusts the annual amount for local costs found in Annex F to include inflation, the total becomes \$800,000. The amount reserved for contingency adds \$40,000, bringing the total to \$840,000. In the ProAg budget the amount was raised to an even \$900,000. The PP further specified that USAID's share of local costs would decline in the second through the fourth years of the project in accordance with the following schedule.

	SESA	PLAN	<b>FINECO</b>
Year 1 (1986-87)	100%		
Year 2 (1987-88)	80%	80%	14%
Year 3 (1988-89)	60%	60%	14%
Year 4 (1989-90)	40%	40%	14%
Year 5 (1990-91)	20%	20%	14%

The first project year was in retrospect considered to have been 1986-87 (October 1986 through September 1987), when there was little ASPAP activity other than the selection of a contractor. There was no local cost contribution in 1986-87, since SESA, the only intended beneficiary, was still using ASAP funds.

If we take the full amount of local costs in current dollars specified in the ProAg (\$2.4 million) and allocate it over four years instead of five, allowing for 5% inflation, total local costs would be spread approximately as follows.

Year 2 (1987-88)	\$556,000
Year 3 (1988-89)	585,000
Year 4 (1989-90)	614,000
Year 5 (1990-91)	645,000
Total	\$2,400,000

<sup>&</sup>lt;sup>10</sup>The project year does not coincide with the GOR fiscal year, which begins in January.

Applying the declining USAID percentages to these figures, we find that, even skipping Year.1, when USAID was expected to bear 100% of SESA's local costs, the formula still would require more from USAID than the \$900,000 budgeted in the ProAg. If not, the GOR contribution would have to be lower. In any case, with the project well into Year 3, what is important is not that the PP's formula was flawed but rather to determine an equitable and useful distribution of USAID's \$900,000 between the three units and over time.

Annex F of the PP is a poor guide to amounts. The Contractor's Representative has performed a useful calculation which expands the PP's base of \$733,000 into the ProAg's full \$900,000. This calculation provides the following breakdown between units:

SESA MINIPLAN	\$597,000 247,000
MINIFINECO	56,000
Total	\$900,000

MINIPLAN's and MINIFINECO's amounts can easily be divided for Years 2 through 5 since nothing was planned for Year 1. It is more difficult for SESA, which was supposed to get \$99,000 in Year 1 but was in fact still drawing on ASAP. Nonetheless, the following breakdown seems to us to be consistent with the PP.

	SESA	MINIPLAN	MINIFINECO	Total
Year 2 (1987-88)	\$213,000	\$94,000	\$13,000	\$320,000
Year 3 (1988-89)	173,000	74,000	14,000	261,000
Year 4 (1999-90)	130,000	52,000	14,000	196,000
Year 5 (1990-91)	81,000	27,000	15,000	124,000
Total	\$597,000	\$247,000	\$56,000	\$900,000

Actual cost reimbursements in Year 2 (4th quarter 1987 through 3rd quarter 1988) amounted to \$257,796. For Year 3, currently in progress, there has been a reimbursement of \$46,632 for the first quarter (4th quarter 1988) and reimbursement of FRw 6,584,727 (approximately \$82,300) for the period January through May 1989 was requested on 6 June. Actual local cost expenditures have thus lagged somewhat behind the schedule above, but unless budgetary help is soon forthcoming from the GOR for SESA, the declining percentage of USAID contributions will soon overtake outlays.

Action is required to (a) gain better control over local cost budgets and expenditures and (b) determine to what extent the GOR can be counted on to make counterpart contributions this year and in the next two. Our recommendations on these points are found in section II.

In late 1988 and early 1989 the local cost problem became steadily more serious. Its acuteness was fully recognized by the USAID mission in May and steps will soon be taken to resolve

the matter. As the problem worsened, the following developments combined to cause a cash-flow crisis over local costs.

- a. SESA, as project coordinator, has been financing local costs out of a bank loan and an advance from MINIFINECO in the absence of an advance from USAID. The PP stated that there would be no advance, but the ProAg did not preclude it.
- b. SESA claimed reimbursement for bank charges in the initial voucher, was denied, and has made no claim since. In 1988 bank charges amounted to FRw one million (\$13,075). This exacerbated the cash-flow problem. USAID will give SESA an advance in the near future.
- c. The amounts and types of expenditure to be reimbursed have not been clearly and succinctly set forth in either the annual work plan or the PIL. We have suggested a simplified PIL only for local costs with budget categories that correspond to GOR classification codes. We have also suggested language requiring units to stay within annual ceilings and allowing individual category overruns of no more than 25%. If the format is adopted by the mission, past problems should be solved.
- d. There has been confusion over whether unexpended funds could be carried over from one year to the next. There is now general agreement that they can be.
- e. Although salary supplements (for SESA only) have been reimbursed quarterly from the start of the project, uncertainty over whether they could continue to be reimbursed under USAID policy has contributed to the long delay over the 1989 work plan. Without approval of the work plan, local cost expenditures for the first quarter of 1989 could not be reimbursed. Some hardship was caused by late salary payments for contract employees.
- f. Poor distribution of copies of fully executed vouchers (Form 1034) kept the ADO office and SESA from knowing the status of dollar disbursements. The Controller's office now intends to furnish Form 1034 copies to ADO on a regular basis.
- g. While the Controller and one of his local employees have verified local cost receipts filed at SESA, no one from ADO has checked them to assure that expenditure items included in the total claimed for reimbursement are reasonable and allowable.
- h. The GOR has not contributed to operating expenditures for SESA, other than utilities, as is required by the ProAg. In order to make such contributions for SESA, which is considered a "project," a line item has to be included in the GOR's Development Budget. For the 1988 budget no request was made since the submission date passed when SESA was still operating on ASAP project funds. For the 1989 budget, SESA requested FRw 8,207,200. However, the 1989 Development Budget has not yet been voted. Meanwhile, other projects that had line items in 1988 are receiving funds under a continuing-resolution type of arrangement.
- i. Now that SESA has been transformed into a division under MINAGRI's Secretary General, it needs to be determined whether operating costs will be henceforth included in the ordinary budget for the ministry. This may be quite difficult; the MINAGRI budget is undergoing severe cuts.
- J. Funds from another USAID-financed project, PRIME, served as a Rwandan contribution to ASPAP for the MINIFINECO unit. There has been little success in accounting for salary and local cost payments made by the Rwandan Government for the MINIPLAN unit.

It. The MINIFINECO unit was encouraged by the project accountant at SESA to spend a large amount on office supplies and furniture for non-project use in late December 1988. The reason for this is unclear. There were no funds in the budget for such expenditures, which were subsequently disallowed by USAID.

Some part of the difficulty over local costs can be attributed to poor communications between the USAID mission and Rwandan officials responsible for the project on the one hand and within the mission on the other. The American project officer has only recently learned, for example, that SESA was borrowing from the bank to finance local costs, while the mission Director was until recently under the impression that local costs were being financed from an advance. If there were semi-annual project reviews with the Project Director, USAID Director, project officers, Contractor's Representative, and other members of the PTG all present, issues could be aired before they became acute and all parties would be better informed than they seem to have been in the past.

### 3. Harmonization of Agricultural Data

Within MINAGRI, both SESA and the Direction Générale of Agricultural Production collect agricultural production statistics. While it is generally accepted that any duplication of effort should be eliminated, there is far less agreement on the type of statistics to be collected and the means to collect and analyze them.

The traditional MiNAGRI data are collected by each monagri at the sector (secteur) level. In early 1988, SESA conducted an informal assessment of the MINAGRI system. There appears to be no standardized method for gathering production, surface area, and yield data, nor are any statistical sampling techniques employed. The data collected are essentially visual estimates or at best very rough measures. Since virtually no data collection supervision is carried out, there is no qualitative data consistency across sectors. Each monagri submits results to the agricom (communal agricultural agent) along with the information necessary to extrapolate data to the sector level (local soil conditions, rainfall, etc.). The "sample" data from all the sectors are progressively extrapolated to the commune and finally prefecture level. The final result is MINAGRI's annual report of agricultural statistics.

The limitations of such statistics are universally recognized. Nevertheless, despite poor data quality, they provide the only agricultural production statistics available at the commune level -- statistics considered by MINAGRi to be useful for project planning and implementation.

Following the assessment of the MINAGRI system, SESA organized a seminar in February 1988 at which it proposed a "harmonized" data collection system. It retained SESA's capacity to generate statistically valid national and prefectoral estimates while gradually improving the validity of MINAGRI's production, surface area, and livestock data. In formulating the proposal, SESA's operating assumption was that MINAGRI held the same priorities as SESA: maintaining viable national and prefectoral estimates. Given the limited resources available to collect recurrent agricultural data, SESA assumed that in the interest of assuring statistical precision, a system which could generate estimates down to the sub-prefecture level would suffice in meeting MINAGRI's needs. This assumption was seriously challenged. Participants seemed quite willing to sacrifice statistical accuracy and objectivity in exchange for better commune data. No agreement was reached as to how "better" data could be collected without maintaining at least rudimentary data collection and sampling standards. SESA's original proposal was rejected outright by the seminar participants.

Our discussions with a Belgian advisor at MINAGRI's Direction des Etudes et de la Planification recapitulated MINAGRI's justification for adopting this posture. First, MINAGRI needs commune-level data if it is to pursue GOR's policy of decentralization. Second, MINAGRI has adopted a strategy to promote geographic specialization of production based on regional comparative advantage to produce particular crops. The advisor argued that national and prefectoral data do not provide the level of detail necessary to pursue this strategy. By the same token, he stressed the importance of retaining SESA's capability to produce its annual statistics.

In an effort to draw the best elements from both data sets, MINAGRI has decided to publish annually yet another set of statistics. The first report on 1986 (published May 1988) contains one data table for each of Rwanda's 143 communes and 10 prefectures; national estimates are also presented. The methodology used to compile these figures is dublous at best. Apparently, MINAGRI's prefectoral estimates (published in MINAGRI's annual report) are accepted as given. Then, with SESA data as a guide, MINAGRI's commune figures are "adjusted" and their relative weights redistributed within the given prefecture totals. Criteria for making such adjustments are in no way quantifiable, nor are criteria consistent across prefectures. In our view, the resulting report provides figures which are less useful than the sum of the two parts and are clearly misleading. In the case of SESA's statistics, data users can readily assess the viability of the estimates; the traditional MINAGRI data can at least be interpreted as qualitative assessments of the relative importance of particular crops. The implicit intention for generating the new estimates is to attach statistical validity to a purely qualitative data set. While we acknowledge MINAGRI's rationale in trying to make the most of its commune data, we seriously question the method.

In May 1988, MINAGRI accepted a revised harmonization proposal prepared by SESA. The plan called for data collection at the "unité opérationnelle" and commune levels, to be phased in over a period of three years (see SESA publication No. DT.15 for details). The new system was to be initiated during the 1989A season. However, due to MINAGRI budgetary constraints, plans were put on hold until late 1989 at the earliest.

As noted in the ASPAP/DAI Semi-Annual Report No. 2, the delay has proved to be a blessing in disguise. SESA has taken advantage of the reprieve to develop simplified data collection techniques appropriate for monagris and more effective than those previously used by SESA. We see an additional benefit of the delay: an opportunity to further reflect upon the feasibility of implementing the May 1988 plan. The following issues deserve further consideration:

Statistical rationale for generating commune-level data. We question MINAGRI's justifications for insisting on the need for commune-level data. While MINAGRI seems to consider this question a most point, it is a valid question when trying to make the most productive use of scarce resources. The argument that MINAGRI needs commune data to pursue GOR's policy of decentralization assumes that the physical and social characteristics of each commune bear little resemblance to those of neighboring communes. Since each of the 143 communes is contained in one of the 12 agro-ecological zones, the communes do indeed share similar features.

If MINAGRI still considers commune data to be indispensable, then perhaps the <u>low-altitude</u> <u>aerial photography</u> proposal should be reconsidered. This may be the most cost effective means to acquire commune data. According to a proposal submitted on March 28, 1989 by Dr. Lassiter to the ADO, the aerial point sampling (APS) method would provide far more detailed land use data than previously provided by SESA field methods. With APS, a 2.1% sample coverage could be achieved, over 33 times larger than the 0.063% land use sample provided in SESA's 1984 National Agricultural Survey. All agricultural land in Rwanda would be sampled for both crop seasons. The APS method uses appropriate technology (regular slide photography and rapid, labor-intensive interpretation techniques); requires minimal expatriate TA for photo interpretation; and uses a technology

developed to analyze land use under multi-cropped, small scale hillside agriculture common to Rwanda. Furthermore, the consulting firm specializing in APS is already established in Nairobi. APS does have some disadvantages, however: (i) it cannot distinguish similar crops in cropping mixtures (sorghum and maize, soybeans and green beans, etc.) or minor crops intercropped with dense stands of larger crops (beans under dense maize, anything under dense bananas, etc.); and (ii) APS methods are still too expensive to be used annually and must be restricted to periodic land use assessments.

<u>Role of monagris</u>. Thus far, all harmonization proposals have been based on part-time participation of <u>monagris</u> in collecting recurrent statistics. This activity would clearly involve more time than <u>monagris</u> currently spend on data collection. Has MINAGRI objectively weighed the consequences of taking on this task at the expense of extension activities?

Harmonization vis-a-vis ASPAP objectives. Whatever system is ultimately accepted and implemented, the extent to which ASPAP funds should be used to support the program is as yet unresolved. Although establishing one data collection system would make the best overall use of scarce resources, its applicability to ASPAP's lorig-term goal to contribute to more informed policy decisions could be perceived as distant at best. Furthermore, allocation of staff time (field supervision, data processing, TA, etc.) and financial resources to implement a harmonization plan implies trade-offs vis-a-vis other SESA activities (special studies, more in-depth analysis of agricultural production data, etc.).

In our final meeting with MINAGRI's secretary general, he acknowledged the financial constraints to collecting statistically sound data at the commune level but fell short of dismissing the need for commune data. He is looking to SESA to propose a solution.

#### 4. <u>ex-MINIFINECO</u>

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The MINIFINECO unit was transferred to the Ministry of Planning in early 1989, though in fact what was transferred were parts of the Direction Générale de la Politique Economique but not the Sectoral Studies Division, which was where ASPAP was located. The Division is no more. The former head of what may be called the ex-MINIFINECO unit ascribes the Sectoral Study Division's demise to a speech by the President in mid-January during which he stated that economic policy was everyone's responsibility, not just one ministry's. The rest of the Direction Générale, namely the Direction de la Conjuncture and the Direction de la Prévision Socio-économique, have been switched to MINIPLAN, where they have been welcomed by the Secretary General, himself an economist from the National University. Within the new combined unit is an economic analysis division, which could house a new, combined MINIPLAN/ex-MINIFINECO unit.

The Sector Studies Division had been conducting the rural commune recurrent cost study, now virtually complete. The Division was about to embark on a family planning study supported primarily by the USAID-funded PRIME Project. The new study is now safely located elsewhere in MINIPLAN.

<sup>11</sup> SESA's techniques to acquire more accurate crop density data could help generate the adjustment factors needed to overcome this limitation partially.

The position of the former director (Direction Générale de la Politique Economique) is that the ASPAP connection with the ex-MINIFINECO unit should now be laid to rest. He gives three reasons:

- (i) The study to which ASPAP had devoted all of its MINIFINECO resources is being printed. All that remains is a small seminar for the heads of the 14 communes in the study sample and a much larger seminar for the heads of Rwanda's 141 rural communes. The seminars should occur in June and August, respectively.
- (ii) The unit in MINIFINECO which was to be strengthened has disappeared.
- (iii) The ex-MINIFINECO unit has consumed almost all its project resources, having exceeded its allotment of STTA and short-term training (section IV.B.), taken its allotment of vehicles, sent its quota of two staff on long-term training and used up almost all of its local cost funds. Little is left but some computer money.

It makes little sense to keep the ex-MINIFINECO Unit separate now that it has so little claim on resources and is in any case within MINIPLAN. We suggest in the next section a way to combine it with the current MINIPLAN unit while moving the location of the new unit within the Ministry.

#### 5. MINIPLAN

A brief history of MINIPLAN's national household budgets and consumption survey (ENBC) and USAID's collaboration with MINIPLAN's Direction des Enquêtes Statistiques will help place ASPAP's present dilemma at MINIPLAN in the proper context.

MINIPLAN initiated the ENBC in 1982 with French financial assistance (FAC). The survey, which is in fact two separate surveys, was implemented in two stages: the rural survey, from November 1982 to December 1983; and the urban survey, from October 1984 to January 1986. As far as we can ascertain, the questionnaires were designed with little consideration for data processing or analysis. With data collection complete and an acute shortage of qualified personnel at MINIPLAN to process the data, MINIPLAN approached USAID for assistance. Under the PRIME project, a computer programmer (Jim Otto) was provided intermittently and two LTTA economic analysts (Nick Minot and Bonaventure Niyibize) worked for varying lengths of time to process, clean, and analyze the rural data only. ASPAP's predecessor, ASAP, also contributed to the effort as Jim Otto's time was shared between computer programming for SESA's Pilot Survey (which preceded the National Agricultural Survey) and the ENBC. ASAF paid Mr. Niyibize's salary and provided one computer and software. As work progressed, serious problems with the data were discovered (missing information, poor quality, etc.). Of the 1170 rural households surveyed, data from 900 households were never tabulated and were eventually discarded primarily due to survey design flaws. Only in late 1988 were the two analytical volumes published containing the core of the rural budget and food consumption results. In all, USAID invested 7 person-years to process and analyze only a part of the rural data from 270 households. What is more staggering is that although MINIPLAN agreed to provide counterparts to work with the technical assistants, a counterpart was assigned for a mere five person-months of the seven years. Repeated requests for counterparts were met with more promises. Now, after this tremendous investment by USAID, no one remains at MINIPLAN trained to undertake the data processing for the urban survey nor to continue analyzing the rural data.

Meanwhile, the ASPAP project paper had been designed to include a three-year policy analyst position to be shared between MINIPLAN and MINIFINECO. As events unfolded and ASAP drew to a close, the ProAg determined that this LTTA should work exclusively in MINIPLAN. The terms of

reference for the position were also changed to place more emphasis on computerized data processing, statistical analysis, survey implementation, and survey design than on policy analysis. A November 1987 letter from the Minister of Plan to USAID specified the following areas in which the LTTA would work:

- -- ENBC data analysis;
- -- planning and coordination of other surveys carried out by the Direction Générale de la Statistique;
- -- training of Rwandan staff to increase data collection and analysis capacity.

Once ASPAP began, the position took over 16 months to fill as a result of a number of complicated events. Since the details are clearly laid out in the ASPAP/DAI Semi-Annual Report No. 2 (pp. 9-11), it is unnecessary to repeat them here. Suffice it to say that the terms of reference outlined above prevailed and Dr. James Ansoanuur took up the post in late November 1988.

In the year before Dr. Ansoanuur's arrival, ASPAP funded five person-months of STTA to work with MINIPLAN almost exclusively on the ENBC urban data set. To date, ASPAP has funded Jim Otto to define computer files, write and test data verification programs, and write a data entry manual and programs for the daily budget questionnaire, all without a MINIPLAN counterpart. When Dr. Ansoanuur took up his post he was assigned to work full time on the urban data set which, it should be noted, is much larger than the rural data set. In Jan-Feb 1989, ASPAP brought in Nick Minot to work with him to develop a strategy for cleaning and analyzing the newly keypunched data set. As of this writing, Dr. Ansoanuur has worked exclusively on cleaning the ENBC urban data and has yet to be assigned a counterpart. In our view, in tackling the urban data set, ASPAP seems dangerously close to repeating USAID's experience with the ENBC rural data set.

- 1) avert such an outcome, we see three problem areas which need immediate attention:
- the lack of a counterpart for the LTTA economist;
- -- the inconsistency between the established terms of reference for the LTTA and his actual tasks;
- -- the incompatibility of software (FOCUS) with local expertise.

<u>Counterpart.</u> While the Direction des Enquêtes Statistiques does have data collection, coding, and data entry capabilities, its analysis capability is very weak. Presently, the Direction's head is the only AO-level staff member. He is burdened with administrative duties, has little time for technical work, and his experience is concentrated far more on data collection than data analysis. The

<sup>&</sup>lt;sup>12</sup>For example, files containing the daily urban budget data occupy 10 Mb of disk space, five times the space for the corresponding rural data (Minot, ASPAP/DAI Report No. 45, p.5).

<sup>&</sup>lt;sup>13</sup>AO is the most senior technical grade of the Rwandan civil service, and requires university training. Lower grades (A1, A2, etc.) require progressively less formal training.

second AO was transfered out of the Direction with the recent GOR institutional reorganization. In any case, he is to begin an ASPAP-funded M.S. degree program this year. The Direction's only A2 staff member begins a one-year course at ISPC this year. In short, no one with analytic skills currently exists in the Direction.

MiNiPLAN's acute shortage of senior staff poses a genuine problem for them in laying out a plan of work. Not only is there still work to be done on the rural data; the urban data and the massive employment survey data remain largely untouched. Furthermore, the Direction continues to collect even more data despite no near-term prospects for analyzing it. From MiNiPLAN's point of view, therefore, given their success in acquiring seven person-years of technical assistance willing to work without counterparts on the ENBC rural data, it seems a rational strategy to seek more TAs to process and analyze the urban data. This is precisely the course events are taking. Dr. Ansoanuur is now working only with junior staff with few prospects for having a qualified counterpart.

MINIPLAN's latest proposal is to have two IAMSEA graduates assigned to the Direction. However, this solution poses two problems. First, MINIPLAN wants ASPAP to pay their salaries. They justify this on the grounds that ASPAP has paid the salaries of SESA employees who had not yet received their official government appointments. Furthermore, they argue, ASPAP pays salary supplements (primes) to SESA's permanent staff, giving them a clear advantage in retaining counterparts for TAs. The PTG favors paying primes.

The second problem related to the proposed IAMSEA solution is that the graduates would only be committed to their posting for one year. Given the low GOR salaries at MINIPLAN, the likelihood of their staying at MINIPLAN is questionable without primes. Graduates most often seek more lucrative postings where such salary supplements are provided through donor-financed projects.

As we see it, the Direction des Enquêtes Statistiques has little motivation to push to find a counterpart for ASPAP's LTTA since their past experience shows that TAs will work without one. Therefore, we believe USAID should now act to seek a solution to the counterpart problem.

LTTA sconomist's terms of reference. This problem area is closely linked to the counterpart issue. As stated earlier, Dr. Ansoanuur has been instructed by the Direction head to concentrate his efforts exclusively on the ENBC urban data set. While the economist's terms of reference clearly state that he should conduct analyses on the ENBC data, the urban data set, to which he has been assigned, is not yet in a form to permit such analyses. In practice, Dr. Ansoanuur has spent his first six months carrying out mundane data processing tasks which should be delegated to junior staff. Specifically, he has been laboriously classifying individual household transactions into different revenue and expenditure categories, even referring to the original questionnaires to further check and clean the data. He will then have to value in-kind transactions and process the food consumption data. Dr. Ansoanuur's work plan, revised in early April, calls for another year of his full-time involvement with the urban data set, much of this time to be spent on simply preparing the data for analysis. We find this situation to be unacceptable. MINIPLAN is clearly using the LTTA in a manner incompatible with the terms of his employment. MINIPLAN requested, and received, the assistance of an economic analyst, not a data coder/processor.

in addition, the LTTA's full-time occupation with the intricacies of the urban data set leave no time for other important responsibilities specified in his terms of reference. Most important is training of Rwandan staff. However, as Nick Minot rightly stated in his February 1989 trip report (ASPAP/DAI Report No. 45), the lack of Ministry staff is a more constraining factor than training per se. For Dr. Ansoanuur's time investment in staff training to pay off, trainees should be at least A1

level. Lower level staff do not have the educational background to develop software programming skills, for example, much less data analysis skills.

None of the LTTA's time is now budgeted to help coordinate other surveys carried out within the Direction. The Direction needs a realistic work plan which takes into account its available personnel resources. The LTTA should not be factored into that plan as a substitute for Direction staff, but be used to support the staff assigned to particular tasks. This clearly implies setting priorities and making hard choices on which of the Direction's data sets should be processed first. The present situation where the ASPAP LTTA is assigned to the urban data while the Direction's staff works on other tasks (e.g. entering employment survey data, processing the anthropometric data, etc.) is not consistent with the LTTA's terms of reference.

FOCUS. All entry, verification, processing, and analysis of the ENBC rural data was completed using FOCUS, a data base management software package. The programs developed for the ENBC data are quite sophisticated and permit at least the preliminary steps of data entry and verification to be carried out by relatively junior staff. However, no remaining MINIPLAN personnel are proficient in FOCUS, although ASPAP has provided 2.3 person-months of formal FOCUS training and innumerable hours of informal training as the TA worked with data entry staff on FOCUS. This means that more technical assistance would have to be pumped into the ENBC to support any further analysis in FOCUS.

The time investment -- almost exclusively that of technical assistants -- to write, test, and refine the FOCUS programs has been enormous. For this reason alone, we see no realistic alternative but to continue processing the ENBC data in FOCUS. Jim Otto has already adapted the rural data entry and verification programs to the urban data set and minimal additional time should be required to adapt the remaining analytical programs (i.e. those which generate the tables produced in Volumes 3 and 4 of the rural ENBC results).

Nevertheless, for several reasons, we question the wisdom of using FOCUS <u>beyond</u> data entry, verification, and preliminary analysis. Several strong arguments can be presented for shifting to SPSS for any further analysis done on the ENBC data sets. First, for people with the educational background of the present Direction staff, SPSS is easier to learn. If any new analyses were conducted, it would be a more realistic objective to train lower-level staff in SPSS than in FOCUS. Second, as mentioned above, none of the remaining Direction staff are profit lent at using FOCUS. Therefore, the training opportunity cost to shift to SPSS for subsequent analyses is virtually nil. Third, SPSS is already being used in Rwanda. All of SESA's data is now filed in SPSS format. In fact, some of the ENBC rural data have been transferred to SPSS format and are stored at SESA. Furthermore, ASPAP has provided SPSS software to IAMSEA, which is planning to train its students to use the program. If MINIPLAN is looking to IAMSEA graduates to augment its ranks in the future, it seems reasonable to make use of the skills they will have acquired.

Possible solutions. The present situation at MINIPLAN's Direction des Enquêtes Statistiques can be summarized as follows. The Director is the only AO remaining in the Direction; he is occupied, for the most part, with administrative matters. The remaining staff are at or below the A2 level. While capable of coding and entering data, they have no data analysis capability. The ASPAP LTTA economist, who has been at his post for six months, does not yet have a counterpart. He is fully occupied with low-level cleaning of the ENSC urban data set and has not yet begun data analysis. MINIPLAN has proposed hiring two IAMSEA graduates in August to work with the LTTA, but has not yet determined how their salaries would be paid. To allow the TA to continue to work under these conditions would not only ignore his terms of reference but would be a tremendously inefficient use of a PhD economist.

It is not at all certain that IAMSEA graduates will be recruited. Therefore, alternative plans of action should not be dependent upon them. In our view, the key objective is to utilize effectively the LTTA's skills and to remain true to the spirit of his original terms of reference.

Option 1. Reassign the LTTA, full- or part-time, elsewhere within MINIPLAN. As discussed in section V.C.4. above, what remains of the ex-MINIFINECO unit has now been transferred to MINIPLAN's Direction Générale de la Conjoncture et Prévision Socio-Economique. The option to shift the LTTA to this Direction Générale has regireral advantages:

- a. The three ASPAP-financed long-term trainees from the ex-MINIFINECO unit and MINIPLAN will return there after training;
- b. MINIPLAN's secretary general is new to his post. Our discussions with him illuminated the importance he places on the newly-configured Direction Générale and his dismay at the underutilization of the ASPAP LTTA;
- c. The Direction Générale currently employs at least five AOs and its acting director is quite dynamic. Thus, the prospects of identifying a counterpart for the LTTA are more promising than in the Direction des Enquêtes Statistiques.
- d. The unspent portion of project local cost funds allocated to the ex-MINIFINECO unit and the present MINIPLAN unit could be combined and redeployed to the Direction Générale under discussion.

This option is not entirely free of problems. The ProAg specifies that in MINIPLAN, ASPAP will work with the Direction des Enquêtes Statistiques. Shifting the LTTA elsewhere in MINIPLAN may require a formal amendment to the ProAg. Furthermore, the director of Enquêtes Statistiques is all too aware that the ENBC urban data will remain unanalyzed for some time to come without the assistance of ASPAP's long-term economist. He will likely bring pressure to bear to retain the LTTA in his Direction.

Despite these obstacles, Option 1 is, in our view, the best of the three options presented here and deserves careful consideration.

Option 2. Reassign the LTTA to other tasks within the Direction des Enquêtes Statistiques until such time as counterparts are made available to him. Under this scenario, several avenues could be pursued. First, the LTTA could assess the potential for further analyses on the ENBC rural data set. These data are now in a form suitable for such analyses. Dr. Ansoanuur could develop an analysis plan and assess the feasibility of cross analyses between the ENBC rural data and other data sets (SESA data, for example). A strategy could also be outlined for shifting the analysis to SPSS, training MiNIPLAN personnel in its use, and then putting these new skills to productive use.

Second, the LTTA could assist the Direction to set priorities for processing other data sets, specifically data from the ENBC urban study and the employment study. Once the Direction realigns its staff to reflect these priorities, the LTTA could help guide them in their work. If IAMSEA graduates are indeed hired, they would fit well into this structure.

Option 2 has serious limitations and is only superficially different from the status quo. It does not solve the counterpart problem. Realistically, the LTTA would continue to work alone under this option although he would be freed to some degree from the tedlous data cleaning he is now doing. Furthermore, Option 2 requires considerable flexibility on the part of the Direction's director. His priority for the LTTA, which rests solidly on the ENBC urban data set, seems fixed and not likely to change.

Option 3. Transfer the LTTA out of MINIPLAN to SESA where the staffing structure is much more conductive to TA-counterpart collaboration. However, we would consider this only as a last resort since SESA's need for an econometrician is somewhat limited at the present time.

#### 6. Temporary Staffing Gap at SESA

The analytic capacity of senior SESA staff will clearly be improved in the long run through M.S. degree training. Nevertheless, the impact of the two-year absence of four staff members on SESA's data analysis capability needs to be considered.

The constraint does not appear to be one of maintaining present levels of activity. SESA's Director (RWAMISIRABO Serge) will complete his M.S. between September 1989 and January 1990. NGIRUMWAMI J. Leonard will act as director until he departs for an M.S. course in January 1990. One SESA analyst (NGARAMBE Octavien) departing for a two-year program in June 1989 presently serves as national data collection supervisor. His tasks will be absorbed in August 1989 by a returning trainee (MUDACUMURA Gideon) who will have completed a one-year ISPC course on survey data methods. Finally, should the present data manager (KAYATSINGA Jean) depart in January as proposed, a returning trainee in survey data processing (SHINGIRO Emmanuel) will fill his post.

Discussions elsewhere in this report highlight the need to expand, rather than maintain SESA's current data analysis portfolio. The two-year absence of M.S. trainees will undoubtedly hamper SESA's capacity to take on new tasks. If SESA's analysts are operating at full capacity, the feasibility of absorbing additional assignments seems questionnable. Ironically, SESA's significant progress in improving data collection and data processing efficiency has in fact increased the workload of SESA's analysts. For example, data processing efficiency has increased through the installation of SPSS and streamlined data entry procedures. However, enumerator efficiency has also improved, allowing them to generate even more data than before. Since analysts are charged with compiling the additional data, the net result is that little if any additional time is available.

Choices will have to be made between allocating analysts' time to special studies or to expanding the recurrent data collection program beyond one of simple administrative statistics. SESA's capacity to accept contracts for conducting special studies may also be restricted.

### D. Institutional Relationships and Performance

This section is based on Annex II, "La contribution des différentes unités de l'ASPAP dans la réalisation du project," which is available only in French and which is bound separately.

Of the three units, SESA has played a far larger role in the project than have the other two, in part because it has been in existence longer and in part because its involvement in the ASAP project left it better organized and better endowed than the others. Both the MINIPLAN and MINIFINECO units have restricted themselves to single large studies under the project, neither one of which has yet been completed, and there have been no examples of joint research undertakings where the units combine forces.

SESA has been more successful in publishing the results of its work and gaining the attention of the public through seminars. The long delays in publishing the results of MINIPLAN's household budget and consumption study (ENBC) have kept them from being used in policy formulation and in the fourth Five-Year Plan. SESA has generated demand for surveys and analysis from donors such

as the World Bank and the European Economic Community, but it has done less well in getting the GOR to respond. The only example of the latter is a request from MINAGRI for a study of wheat production potential and constraints.

As far as having an impact on policy making is concerned, SESA's 1987 study of beans and sorghum is sometimes cited as a case where a study influenced the Government to modify its policy of setting food crop prices. In fact, many factors were influential, including the abundant harvest of 1985-86 which caused foodcrop prices to fall to their lowest level.

One of the reasons why SESA studies have had relatively little impact so far is because the results have not been made available to decision-makers in a timely and useable fashion. In some cases distribution has been inadequate. In others decision-makers have felt that SESA's research results were still too unrefined to be useful. Finally, those who may want data at the commune level have not been able to obtain it from SESA.

It should be noted, however, that SESA's elevation to the status of a division under the Secretary General of MINAGRI and its mandate to take charge of gathering and analyzing agricultural statistics are testimonials to its capabilities and to the recognition it has achieved in the eyes of the highest political authorities.

Lack of a uniform policy on salary supplements (<u>primes</u>) between the three units is an irritant. SESA's supplements are a carry-over from the ASAP project, but they were not extended to the other two units. Some officials feel that this has caused and will cause the loss of staff.

#### VI. PROJECT IMPACT TO DATE

### A. Relevance of Outputs to Rwandan Policy Matters

This section is based on Annex I, "L'Impact des études et analyses effectuées par l'ASPAP sur l'élaboration des politiques agricoles," which is available only in French and which is bound separately.

The different studies and analyses conducted by the ASPAP project can be divided into three groups: (a) routine agricultural statistical surveys, (b) special studies of the agricultural sector, and (c) specific studies tied to agricultural policy analysis. The first group, which includes farmer surveys to assist in crop forecasting, is of capital importance because these surveys provide users with statistical data that are more precise and reliable than those furnished by MINAGRI's commune-level agronomists. A typical example is SESA's cattle survey which yielded a much higher cattle population than had been previously estimated. SESA's figures were subsequently confirmed in the course of a rinderpest vaccination campaign.

The value of the special sectoral studies varies. Some are quite important. These include the study of the importance of beans and sorghum in Rwandan foodcrop production systems. These two crops are staples, can be stored, and are widely marketed. The study of the use of lowlands (marais) is valuable because of the potential of these areas. On the other hand, studies such as the one on wheat, conducted at the request of MINAGRI, are much less worthwhile. Production potential and constraints for wheat are already well known.

Among the studies related to policy analysis, the one conducted at the request of the World Bank on land tenure and the one on non-farm income strategies are of particular importance to policy issues. The increasing population pressure, continuing subdivision of agricultural lands, and declines in soil fertility are all matters of great concern.

Knowledge of SESA's work also varies among potential users. The results of the 1984 National Agricultural Survey (ENA) have been widely circulated. Survey results have been used for sectoral plans within the fourth Five-Year Plan and in the formulation of policies to encourage greater regionalization of agricultural production. However, the results of the more recent studies, those begun under ASPAP rather than its predecessor project, do not seem to have been brought to the attention of many users or digested by those who have received them.

Initial distribution of SESA documents is too limited and should be increased so that more individuals within ministries and other institutions have ready access to them. SESA has done a good job of conducting seminars, nine in all, to publicize results.

#### B. The Gap Remaining

We have referred above to the gap between data analysis and policy making. ASPAP has not yet bridged the gap, though it has had an influence on new governmental initiatives such as regional specialization for certain crops. We would be most surprised if it had and do not consider the fact that it has not to be a shortcoming. We would hope, however, that by the time ASPAP is completed in September 1991, the project is better positioned to have some influence. It is unlikely that the gap can be closed unless and until there is a third phase, which we recommend there be.

The criticisms that are made of ASPAP as a project that is supposed to have an influence on policy are twofold. First, the Secretary General of MINAGRI has formed the opinion, however well informed it may be, that the results of SESA's research tend to be too technical, too complex, too encumbered with other concerns to be useable by decision-makers in the higher reaches of government. The SG does not find SESA's output to be readily translatable into any concrete measures that the Ministry might want to suggest in government councils. It should be noted, of course, that the SC is relatively new in his position. He is convinced of the validity of SESA's data, but he may be expected to become more comfortable with the project's output once he has had more exposure to SESA's Director and to SESA's operations.

The second criticism, voiced by the Presidency's Economic and Financial Affairs bureau, is that policy-makers must take into consideration a heat of political and other matters that fall outside the realm of ASPAP research. They have a much larger context into which the findings and possible recommendations of ASPAP outputs must be placed. As the officials of the Presidency put it, decision makers must be persuaded that their major concerns have been taken into account if they are to consider the recommendations of scholarly researchers. They are not convinced so far that the larger context has been present. They believe there is still much work to do to find a middle ground where researchers understand decision-makers concerns and the latter grasp the validity and applicability of the former's findings.

How to find this middle ground or <u>terrain d'entente</u> should be a major thrust of the project in its last two years, though it should in no way neglect to consolidate the strong foundations it has built. The principal way of making research results known to a wide audience of government officials of various ranks has been the seminar. In Rwanda, where discussion and consensus-building are valued as a prelude to making decisions, the seminar has proved to be a good forum. But it can be overdone (the Minister of Agriculture ordered a temporary stop to seminars last year because he thought there had been too many).

#### C. What Has Been Accomplished

ASPAP has indeed had an impact on Rwanda, a good one, but it is perhaps not quite as spectacular as the project's designers may have hoped. We contend that it was not realistic to think that there would be a smooth, easy, almost automatic transition from collecting and analyzing agricultural data to having a tangible influence on policy. This over-optimism about results was not limited to ASPAP but has been common to a number of similar projects in recent years.

The impact of ASPAP has been less dramatic, but it is important and beneficial and full of promise for the future. As a Belgian advisor at the Presidency commented to us, the project's importance should not be underestimated. Its success has caused a change in thinking, he maintained. There have been several new initiatives inspired by ASPAP that would not have been tried otherwise. There is real interest in what one can conclude based on the study of a scientific sample of objective data. There is an evident readiness on the part of Rwandan officials to learn what scientifically gathered evidence shows is really happening in the rural sector. The old conventional wisdom has been replaced in important respects by knowledge gleened from ASPAP studies. Officials are quick and pleased to relate that their thinking has changed. This is far from a common reaction elsewhere. There is little evidence of it, for example, in Cameroon, where a similar project has been in existence almost as long as ASAP/ASPAP.

The advisor at the Presidency thinks that this openness to what can be learned from well-conducted and carefully analyzed surveys has reenforced Rwanda's image abroad. He thinks that ASPAP and its predecessor ASAP can take a great deal of credit for this accomplishment. A very solid foundation has been built, and this is the real attainment of the project. No striking policy changes have been brought about, but it would have been amazing if they had been since Rwanda does not engage in the kind of market interventionism and control that has caused so much distortion elsewhere.

Instead, the project has carved out a place for itself that is highly valued by Rwandan officials and pointed to with pride by some. They see that the World Bank and other donors, as one official put it, make a beeline for SESA to lay their hands on solid information about the agricultural sector. They know that both donors in an immediate sense and the GOR over the longer term can use this new wealth of objective data for project design, for planning, and even for policy modification.

The last step is the hardest and will take the longest to occur, but the base is there. Now is the time to take advantage of the great gains that have been made, to consolidate them, and to determine how to breech the large gap between scholarly analysis of good data and having an influence on policy-making. It was in estimating the size of that gap that ASPAP's designers fell short.

#### Appendix A

#### LIST OF PERSONS CONTACTED

- Mr NZABONIMANA Callixte, Ministre du Plan
- Dr HAKIZAMUNGU Ignace, Secrétaire Général au Ministère de l'Agriculture, de l'Elovage et des Forête
- Mr BAHIGIKI Emmanuel, Secrétaire Général au Ministère du Plan
- Mr RWAKAYIGAMBA Pierre, Secrétaire Général à la Présidence de la République, chargé du Service des Affaires Economiques et Financières
- Mr James GRAHAM, Directeur de l'USAID à Kigali
- Mr KANIMBA François, Directeur Général des Statistiques au Ministère du Plan
- Mr KAYIHURA Michel, Directeur à la Présidence de la République, chargé de la Section Développement Rurai
- Mr BOUCHET, Conseiller à la Présidence de la République, Service de la Planification
- Mr Charles JEANNEVET, Conseiller à la Présidence de la République, Service des Affaires Economiques et Financières.
- Mr BAZIHIZINA Cléophas, Directeur des Etudes et Planification au Ministère de l'Agriculture, de l'Elevage et des Forêts
- Mr Gilbert DELEPIERRE, Conseiller au Ministère de l'Agriculture de l'Elevage et des Forêts, Direction Etudes et Planification
- Mr Paul CRAWFORD, Chargé de la coordination des projets agricoles à l'USAID
- Dr NDOREYAHO Valens, Responsable des projets agricoles à l'USAID
- Mr RWAMASIRABO Serges, Coordinateur du Projet ASPAP et Directeur du SESA
- Mr Gregory LASSITER, Conseiller au SESA et Représentant de Development Alternatives, Inc.
- Mr MULIGO Théodomir, Directeur des Enquêtes Statistiques au Ministère du Plan et Coordinateur de l'Unité ASPAP-MINIPLAN
- Mr MBAGUTA J.M.V., Coordinateur du Projet PRIME et de l'Unité ex-MINIFINECO.
- Mr NDEREYEHE NTAHONTUYE Charles, Coordinateur du Projet d'intensification agricole de Gikongoro (PIA)
- Mr Khiem NGUYEN, Technical Assistant, Communal Recurrent Cost Study
- Mr James ANSOANUUR, ASPAP Technical Assistant, MINIPLAN

# ASPAP/DALTECHNICAL ASSISTANCE AND TRAINING

Sonnaire de l'Assistance Technique de Courte Durée Fournie par le Contrat ASPAP/DAI

Consultant	Dates	Jours				is  FINECO	Activité Primeire
			*** P4	riode	tess	ie (1/	87 - 1/89) ***
Ignatius Peprah	10/87	30	1.4			1.4	Rédaction de termes de réference de l'étude sur l'autofinancement
Jim Otto	10-12/87	63	2.9	1.0	1.9		Dépouillement (IMBC), commande des ordinateurs, formation (FOCUS)
Dan Clay	11/87	22	1.0	1.0			Plen du traveil du SESA et planification de formation (TIP)
David Wilcock [2]	11/87	11	0.5	0.2	0.2	0.2	Plan du travail du SESA et coordination avec DAI/W
Nike Weber	11/87	6	0.3	0.3			Plan du travail du SBSA et planification du séminaire sorgho
Tom Zalla	1-2/88	32	1.5	1.5			Séminaire sur l'harmonisation de collecte des statistiques agric.
Catherine Tardif-Douglin	3-4/88	40	1.8	0.9	0.5	0.5	Formation en SPSSPC
Barky Diallo	3/88	10	0.5	0.3	0.1	0.1	Recensement de besoins en formation/séminaires du U. Pitts
Jim Otto	3/88	6	0.3			0.3	Plan du dépouillement de l'étude UNR sur les coûts de production
Elaine Aderhold	2-6/88	11	0.5	0.5			Etude préliminaire sur la photographie aérienne à basse altitude
Dana Slaymaker	4-5/88	15	0.7	0.7			Etude préliminaire sur la photographie aérienne à basse altitude
Scott Loveridge	3/88	22	1.0	1.0			Séminaire sur la production et commercialisation du sorgho
Dan Clay	3/88	22	1.0	0.6	0.2	0.2	Planification: formation, barmonisation, et stratégies non-agric.
Tom Zalla	4-5/88	22	1.0	1.0			Harmonisation de collecte des statistiques agricoles
Tony Barclay [2]	5/88	6	0.3	0.1	0.1	0.1	Contrôle/évaluation des activités DAI et coordination avec DAI/W
Catherine Tardif-Douglin	4-10/88	147	6.7	6.7			Etude stratégies non-agricoles
Félicien Gatabazi	7-10/88	66	3.0			3.0	Etude sur l'autofinancement des coûts récourrants communaux
fmile Wyungura	7-10/68	66	3.0			3.0	Etude sur l'autofinancement des coûts récourrants communaux
Jim Otto	8-10/88	46	2.1	0.1	1.6	0.4	Dépouillement EMEC, UMR/FIMECO coûts de prod., commande d'ordin.
Dan Clay	8/88	22	1.0	1.0			Echantillonage, harmonisation, étude stratégies non-agricoles
Ton Talla	8/88	15	0.7	0.7			Méthodologies de collecte des statistiques et harmonisation
Thien Nguyen	5/88-8/89	253	11.5			11.5	Etude sur l'autofinancement des coûts récurrants communaux
Dan Clay	10/88	22	1.0	0.8	0.1	0.1	Formation, méthodologies d'enquêtes, et stratégies non-agricoles
Scott Loveridge	12/88-1/8	9 52	2.4	2.4			Rédaction et traduction du rapport sur le sorgho/haricot
Wick Minot	1-2/89	36	1.6		1.6		Dépouillement des données EMBC Urbain
Sous-Total:			47.4	20.6	6.3	20.6	

# Sonnaire de l'Assistance Technique de Courte Durée Fournie par le Contrat ASPAP/DAI

|-- personnes-mois --|

Consultant	Dates	Jours				PINECO	Activité Primaire
			*** 7(	riode	Acti	ielle (	1/83 - 7/89) ***
Scott Loveridge	3-4/89	32	1.5	1.5			Rédaction et présentation du rapport du séminaire des politiques
Tom falls	12/88,4/89	28	1.3	1.1			Organisation et exécution du séminaire sur les politiques agric.
Dan Clay	4/89	22	1.0	0.8	0.1	0.1	Séminaire des politiques, stratégies non-agricoles, et formation
Jim Otto	5/89	23	1.0	0.0	1.0		Dépouillement des données EMBC Urbain
Scott Loveridge	5-7/89	24	1.1	1.1			Questionnaires 89B/90A, contacts Burundi/Zaire, Bini-séminaires
David Wilcock [2]	5/89	10	0.5	0.2	0.2	0.2	Contrôle/évaluation des activités DAI et coordination avec DAI/W
Tony Barclay [2]	6/89	4	0.2	0.1	0.1	0.1	Contrôle/évaluation des activités DAI et coordination avec DAI/W
Nick Minot	6-7/89	45	2.0		2.0		Dépouillement des données EMBC Urbain
Dan Clay	7/89	22	1.0	1.0			Stratégies non-agricoles et formation
David Wilcock	7-9/89	35	1.6	1.6			Rapport sur les politiques agricoles, coordination avec IBRD.
Sous-Total	l:		11.1	7.4	3.4	0.3	
:::::::::::::::::::::::::::::::::::::::	:::::::::::::::::::::::::::::::::::::::	::::::	::::::	33323	2222	******	***************************************
Total Déja Engagé (jus	squ'au 7/89)	:	58.5	28.0	9.7	20.9	$(\mathbf{x}_{i}, \mathbf{x}_{i}) = \mathbf{x}_{i} + \mathbf{x}_{i}$
Prévision du Contrat D % Déja Engagé:	PAI:		112 521	88 321	12 81	12 1744	
Prévision Révisée [1]: % Déja Engagé:			112.0 524			20.9 100%	•
Restant & Engager:			53.5	52.1	1.4	0.0	
**************************************	:==========			::::::	:::::		06/02/89

<sup>[1]</sup> Prévision de STTA révisée à cause de l'utilisation sur budget de FINECO avec réductions aux SESA et PLAM proportionnelles aux prévisions de base.

<sup>[2]</sup> Budgetisé sous les rubriques "Contrôle/gestion" et "Appui technique".

## Scameire de la Forgation de Courte Durée Fournie par le Contrat ASPAP/DAI

Type de Formation	Formateur	Dates	Pers- onnes	Jours	pe TOTAL				
			*** 26	riode	Passée	(8/8	7 - 1	7/89}	111
JORNATION I	AU RWANDA:								
Comptabilité Informatisée	Projet BGM	10/87	4	5	0.9	0.5	0.2	0.2	E. Mukabagire, F. Uwazigira, M. Mukarugwiza, E. Ramali
POCUS	Jim Otto	12/87	7	13	3.2	0.9	2.3		E. Shingiro, J. Sehene, S. Munyaneza J. Hakizimana, 3 autres participants du MINIPLA
Tech. Agricole Appropriée	Michigan Extension Service	12/87	1	8	0.4	0.4			S. Rwamasirabo (MSU M.S. program)
LOTUS	Greg Lassiter	12/87	3	6	0.8	0.8			7. Kampayana, J. Kayitsinga, O. Hgarambe
Lotus	Greg Lassite:	1/88	. 3	4	0.5	0.5			E. Shingiro, G. Mudacumura, R. Rudahumbirwa
Séminaire sur l'Harmonisation	Tom Zalla et l'équipe du SESA	2/88	55	1	2.5	2.5			Personnel du MIMAGRI (DGs et Directeurs, Agriprefs, Monagris, etc.)
Séginaire sur le Sorgho	Scott Loveridge et l'équipe du SESA	3/88	38	1	1.7	1.6	0.1	0.1	Décideurs des politiques économiques, DGs, et Directeurs des Services du gouvernment
SPSSPC	C. Tardif-Douglin	3/88	6	15	4.1	4.1			T. Kampayana, J. Kayitsinga, O. Mgarambe, E. Shingiro, G. Mudacumura, J. Sehene
SPSSPC	C. Tardif-Douglin	4/88	6	15	4.1		2.0	2.0	S. Munyaneza, Z. Murwanashyaka, V. Mzeyimana A. Uwizaye, P. Muhingabire, L. Bwanadiru
Comptabilité Informatisée	Projet BGM	6-12/88	1	60	2.7	1.6	0.5	0.5	3. Mukabagire, 7. Uwazigira, M. Mukarugwiza, E. Kamali
Initiation à l'ordinateur	Compulec	6/88	9	2.5	1.0		0.5	0.6	L. Bangamwabo, E. Kandunga, P. Mukansanga, F. Myilihanbe, C. Mpinganzima, C. Batamuliza L. Uwumubyeyi, C. Mshimyumuremyi, L. Mafishi
Wordprefect	Compulec	6/88	10	5	2.3		1.1	1.1	L. Bangamwibo, E. Kandunga, P. Mukanhanga, J. Mkurunziza, F. Nyilibanbe, L. Mafishi, C. Mpinganzima, L. Uwumubyeyia, C. Batamuliz C. Nshimyumuremyi
Wordperfect	G. Bucyedusenge	7/88	3	5	0.7	0.7			M. Ikilinzayire, F. Hyacinthe, G. Rayinganwa
Apprentissage en Méthodes des Enquêtes & SPSS		7-9/88	3	66	9.0	9.0			I. Hgenzi (IAMSEA), A. Munyangaju (UMR), et S. Murebwayire (UMR)
Apprentissage: Mémoire sur Migrations	Dan Clay et Jean Kayitsinga	9/88-6/89	1	138	6.3	6.3			I. Ngenzi (IAMSBA)

06/02/89

Type de Formation	Forsateur ====================================	Dates	onnes		TOTAL	SESA	nes mo Plan	FINEC	
Méthodes des Enquêtes (69A)	G. Lassiter et staff du SESA	10-11/88	18	2.5	10.0	10.0			78 enquêteurs et 10 superviseurs du SISA
Apprentissage: Mémoire sur l'Elevage	Serge Rwanasirabo	1-3/89	1	66	3.0	3.0			A. Kunyangaju (VIR)
FORMATION	HORS DU RWANDA:								
Informatique	ISPC/BUCEN Washington, DC	5/88-8/89	1	330	15.0	15.0			I. Shingiro
Méthodes d'Enquêtes	ISPC/BUCZN Washington, DC	6/88-8/89	1	308	14.0	14.0			G. Mudacumura
Gestion du Développement	Univ. of Pittsburgh (Séminaire FDMS)	6-8/88	4	50	9.1	3.6	3.6	1.8	J. Ngiruawami, A. Uwizeye, J. Kabiligi P. Muligo
Elevage d'ovins et caprins	Alabama A&T University	6/88	1	9	0.4	0.4			S. Rwamesirabo (MSU M.S. program)
Sous-Total	:				91.7	75.0	10.4	6.4	
FORMATION	AU RWANDA:		*** 96				8/88 -	·	
Méthodes des Enquêtes (898)	G. Lassiter et staff du SESA	3/89	88	1	4.0	4.0			78 enquêteurs et 10 superviseurs du SESA
SPSS	Brownen Hook	5-6/89	i	12	0.5	0.5			H. Pabiola
Séminaire sur les Politiques Agricoles	STTA ASPAF et l'équipe du SESA	4/89	35	2	3.2	3.2			Décideurs des politiques économiques, DGs, et Directeurs des Services du gouvernment
	STTA ASPAP et l'équipe du SESA	4/89	25	1.5	1.7	1.7			3 Mini-seminaires (1/2 jour chacun): ISAR (15 auditoires approx.), UNR (30), et Station ISAR/#SAP à Rwerere (30)
FORMATION !	HORS DU RWANDA:								
Informatique	ISPC/BUCKN Washington, DC	5/89-8/90	1	330	15.0		1	15.0	P. Muhingabire
Gestion du Développement	Univ. of Pittsburgh (Séminaire FDMS)	6-8/89	1	50	2.3	2.3			J. Begiramensbí
Analyse des Politiques Ag.	Harvard Univ. Kenya Workshop	7/89	1	25	1.1	1.1			S. Rwamasirabo
Sous-Total:	1				27.8	12.8	0.0 1	5.0	
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## Sommaire de la Formation de Courte Durée Fournie par le Contrat ASPAP/DAI

**	Type de Pormation	Formateur	Dates	Pers- onnes Jours	pe   TOTAL				Nome des Participants	
	Total Déja En	ıgagé:			119.5	87.8	10.4	21.4		
ı	Prévision du t Déja Engagé	Contrat DAI/MSU/	J. Pitt:			15 585 <b>%</b>	5 207 <b>%</b>	-		
	Prévision des % Déja Engagé	Accords du Proje i:	it ASPAP:		50 239 <b>t</b>	15 585 <b>t</b>	15 69%	20 1071		

Budget ASPAP/DAI de la Formation de Courte et de Longue Durée

	\$000	pii	\$/9#	pa	pn	p <b>a</b>	\$000	pa 	ps	pB	рв	\$000	•	p <b>a</b>	P#	p1
FORMATION TOTAL [1]:	1527.0	751	4114	184	78	92	495.5	165	12R	11	26	1033.6		86	70	60
IOMMITON IOMM [1].				•••						••	••			••	••	•
ontrat DAI [2]	253.0		2074	72	10	32	217.5		79	11	26	37.6	33	23	10	0
ous-contrat DAI/MSU	1154.0	208	5548	104	52	52	278.0	49	49	Ç	0	876.0	159	55	52	52
	120.0	24	5000	8	3	8	0.0	0	0	0	0	120.0	24	8	â	â
FORMATION DE COURTE DUREE:		•														
ontrat DAI																
Programme d'apprentissage [3] Séjours professionnels:	10.0	. 6	627	10	3	3	5.2	26	23	0	3	4.0	15	12	3	0
Aux USA (Séginaire Pitt.) [4]	68.7	10	6868	6	2	2	70.2	10	4	4	2	0.0	0	G	٥	0
En Afrique [5]	15.1		3767	2	1	ī	6.7	1	i	Ö	ō	B.4	i	1	Ď	G
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ous-contrat DAI/Univ. Pitts. [9]	120.0	24	5000	8	8	8	0.0	0	0	0	0	120.0	24	8	8	9
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<sup>[6] 10</sup> séminaires x 1 jour x 22 personnes (de 1 pm et \$1500 chacune)
[7] Informatisation de Comptabilité (\$15500), Pormation en Wordperfect/Init. Info. à COMPULEC (\$2275), et Stages par TA (\$6)
[8] 2 mois de formation specialisée à courte durée pour chacun des 8 candidates de N. S.
[9] 4 ateliers sur la gestion au Rwanda (de 22 personnes x 1 semaine, donc 5 pm chacun)
[10] Equivalent à 8 N. S. (8 x 26 mois) avec \$56,000 pour formation à courte terme exclus

# Liste de Publications de la Division des Statistiques Agricoles (DSA)

(Ancien Service des Enquêtes et Statistiques Agricoles--SESA)

NO. P.01: METHODOLOGIE ET RESULTATS SOMMAIRES DE L'ENQUETE NATIONALE AGRICOLE, PHASE PILOTE, 1985, 89 pages, 900 FRWS.

Ce document qui insiste davantage sur l'aspect méthodologique aborde d'autres points intéressants, à savoir:

- a) La phase d'identification (travail de bureau) comprenant la détermination des objectifs, la conception et l'élaboration des questionnaires, l'échantillonnage, les techniques de pondération, etc.
- b) Les opérations sur terrain comprenant la collecte des données et la vérification des questionnaires;
- c) Le traitement informatique, le redressement automatique, l'exploitation et la préparation des tableaux, etc.

Ce document fait aussi le sommaire des résultats obtenus lors de l'enquête pilote portant notamment sur la composition du ménage agricole, la superficie moyenne des exploitations agricoles, l'utilisation des terres, l'élevage et le niveau de production de certaines cultures principales.

NO. P.02: SOMMAIRE DES RESULTATS DE LA PHASE PILOTE DE L'ENQUETE NATIONALE AGRICOLE, 1985, 87 pages, 900 FRWS.

Ce rapport qui constitue un extrait de la publication NO. P.01 insiste beaucoup plus sur les résultats sommaires de la phase pilote et n'aborde donc pas l'aspect méthodologique. On pourra y trouver des informations plus détaillées sur la population agricole, les caractéristiques du chef de ménage, la taille des exploitations, morcellement des parcelles, les terres sous cultures, l'élevage et la production des principales cultures.

NO. P.03: RESULTATS DE L'ENQUETE NATIONALE AGRICOLE 1984, Rapport 1 - Volume 1, 1985, 425 pages, 4300 FRWS.

Outre une introduction générale : un aspect méthodologique qui fournissent au lecteur les éléments indispensables pour l'interpréta un des tableaux, ce volume 1 du rapport 1 est une compilation des principaux résultats chiffrés obtenus après la réalisation de la collecte et la tabulation des informations recueillies sur terrain. Ces résultats sont ventilés par préfectures, régions agro-écologiques et zones géographiques. Les chiffres portent notamment sur les caractéristiques démographiques de la population agricole, l'utilisation des terres et la taille de l'exploitation, les productions agricoles et l'inventaire des cheptels.

NO. P.04: RESULTATS DE L'ENQUETE NATIONALE AGRICOLE 1984 Rapport 1 • Volume 2., 1986, 378 pages, 3800 FRWS.

Débutant comme le volume 1, ce volume 2 du rapport 1 ventile les mêmes caractéristiques du secteur agricole mais cette fois-ci croisées avec un sous ensemble de variables clés et ce aussi par préfecture, région agro-écologique et zone géographiques. Les données chiffrées portent essentiellement sur le croisement des variables listées pour le Rapport 1, Volume 1 pour mieux étudier leur interaction.

NO. P.05: RESULTATS DE L'ENQUETE NATIONALE AGRICOLE 1984, Rapport 1 - Volume 3, 1986, 201 pages, 2000 FRWS.

Ayant la même introduction standard que les deux volumes précédents, ce volume 3 du rapport 1 compile les informations sous forme de tableaux concernant le questionnaire "Données Saisonnières". Celles-ci consistent dans une première section en une distinction entre la main-d'ocuvre extérieure utilisée sur l'exploitation et les prestations des membres de la famille en dehors de l'exploitation et en des estimations des productions animales dans une deuxième section tandis que la troisième traitait l'aspect commercialisation.

NO: P. 06: RESULTATS DE L'ENQUETE NATIONALE AGRICOLE 1984, Rapport 1 - Volume 3 Annexe, 1986, 115 pages, 1200 FRWS.

Il s'agit d'un annexe du volume 3 renfermant les tableaux des erreurs de sondage pour toutes les variables considérées dans le questionnaire "Données Saisonnières".

NO. P. 07: PERTES DE TERRES DUES A L'EROSION. RESULTATS DE L'ENQUETE PILOTE SUR L'EROSION (ANNEE AGRICOLE 1984), par Yvan DEJAEGHER, 1984, 24 pages, Stock épuisé.

Ce rapport à caractère descriptif essaie d'hiérarchiser les différents types d'occupation du sol en fonction de leur efficacité à protéger les terrains contre l'érosion et de tester l'efficacité de certaines associations de cultures, de certaines pratiques culturales et anti-érosives, en vue du calibrage de l'équation universelle de WISCHMEIER.

NO. P.08: DESCRIPTION SOMMAIRE DES PRINCIPALES CARACTERISTIQUES DE L'AGRICULTURE AU RWANDA. ENQUETE NATIONALE AGRICOLE 1984. Rapport 2, 1987, 86 pages, 900 FRWS.

Ce rapport identifie les aspects saillants de l'agriculture au Rwanda dans un esprit de synthèse. Il met à la disposition de l'utilisateur les principaux résultats principalement sous forme de textes et de graphiques émanant des analyses déjà amorcées mais d'une façon encore peu approfondie. Les informations portent surtout sur la composition et les principales caractéristiques démographiques de la population agricole, l'utilisation des terres, la production vivrière et caféicole, l'élevage, l'utilisation de la main-d'oeuvre agricole ainsi que sur le volet l'érosion.

NO. P. 09: INTEGRATION REGIONALE DES PRIX ALIMENTAIRES AU RWANDA: 1970-1986, par Sharon BYLENGA et Scott LOVERIDGE, 1987, 22 pages, 300 FRWS.

Ce document est une analyse de corrélation des prix de détails entre les marchés (1970-1986) pour quatre produits hautement commercialisés au Rwanda, à savoir : le haricot, le sorgho, la pomme de terre et la banane. L'analyse identific les marchés que l'on dit "intégrés" (cohérents) pour tel ou tel produit et aborde aussi l'influence de l'amélioration du système routier de transport sur l'intégration des marchés.

NO. P.10: RESULTATS D'UNE ENQUETE SUR LE NIVEAU DE COMMERCIALISATION DU HARICOT A L'ECHELON DU PRODUCTEUR, par Serge RWAMASIRABO, Théobald KAMPAYANA et Scott LOVERIDGE, 1987, 14 pages, 300 FRWS.

Ce document présente de nouvelles informations recueillies par le SESA sur le sous-secteur du haricot. Y sont abordés notamment les problèmes de stocks de sécurité alimentaire, la spécialisation régionale de la production, et les politiques des prix.

NO. P.11: RESULTATS D'UNE ENQUETE SUR LE NIVEAU DE COMMERCIALISATION DU SORGHO A L'ECHELON DU PRODUCTEUR, par Scott LOVERIDGE et d'autre cadres du SESA, 1987, 29 pages, 300 FRWS.

Ce document présente de nouvelles informations recueillies par le SESA sur le sous-secteur du sorgho. Y sont abordés notamment les problèmes de siccks de sécurité alimentaire, la spécialisation régionale de la production, et les politiques des prix.

NO. P.12: CARACTERISTIQUES DESCRIPTIVES DES COMMERCANTS DES PRODUITS VIVRIERS OPERANT SUR DES PLACES FIXES DANS CINQ PREFECTURES DU RWANDA, Scott LOVERIDGE et J.Léonard NGIRUMWAMI, 1987, 52 pages, 500 FRWS.

Ce document fournit quelques renseignements sur les types d'investissement que font les commerçants dans le domaine des produits vivriers (Haricots, Sorgho, Pomme de terre), sur les variations des coûts de commercialisation de ces produits. Il tente aussi d'identifier les points faibles ainsi que les différents acteurs de la chaîne de distribution d'un produit vivrier.

NO. P.13: MODE D'OPERATION STANDARD DES COMMERCANTS DES PRODUITS VIVRIERS OPERANT SUR DES PLACES FIXES DANS CINQ PREFECTURES DU RWANDA, par J. Léonard NGIRUMWAMI et Scott LOVERIDGE, 1987, 39 pages, 400 FRWS.

Ce document contient des informations sur les stratégies des types de commerçants oeuvrant sur des places fixes face à certaines situations ainsi que sur certains éléments tels que les volumes d'achat, les ventes, les bénéfices, les moyens de transport, la capacité de stockage et le nombre de voies d'écoulement.

NO. P.14:

APERCU HISTORIQUE ET METHODOLOGIQUE DE L'ENQUETE NATIONALE AGRICOLE 1984, par Yvan DEJAEGHER, Dan CLAY, Serge RWAMASIRABO et J.L NGIRUMWAMI, 1988, 124 pages, 1300 FRWS.

Ce document fournit tous les détails sur la façon dont toutes les activités de l'Enquête Nationale Agricole ont été menées. Il fournit aux utilisateurs un ensemble exhaustif de faits concernant les méthodes de collecte et de traitement des données de l'Enquête. On y trouve surtout les informations sur le développement historique du projet, le plan d'échantillonnage, le contenu de l'enquête, les définitions des concepts, les méthodologies, le contrôle de la qualité des données et les coûts par catégorie de dépenses.

NO. P.15: ESTIMATION DE LA PRODUCTION PAR LES AGRICULTEURS, par Yvan DEJAEGHER, 1988, 22 pages, 300 FRWS.

Dans le souci de mettre en place une méthode d'estimation légère, peu coûteuse et rapide de la production vivrière en milieu rural, le SESA a mené une étude sur l'évaluation du pouvoir estimatif "Quantitatif" des cultivateurs envers la production total de l'exploitation pour la saison en cours (environ un mois avant la récolte). Le présent document est donc une discussion des principaux résultats obtenus de cette étude.

NO. P.16:

IMPORTANCE DU HARICOT ET DU SORGHO DANS LE SYSTEME DE PRODUCTION DES CULTURES VIVRIERES AU RWANDA: DISPONIBILITES ACTUELLES ET PROJECTIONS POUR L'AVENIR, par Scott LOVERIDGE, 1989, 122 pages, 1200 FRWS.

Ce document décrit la chaîne de commercialisation des deux produits et montre que le Rwanda rural importe les quantités non-négligeables de haricot et de sorgho. La majorité des ménages agricoles est acheteur net des deux produits. Les acheteurs nets sont généralement plus démunis que les vendeurs nets. Les ménages les moins productifs en termes caloriques par personne dépendent beaucoup plus sur la patate douce que les ménages plus aisés. La culture de la patate douce apporte plusieurs avantages par rapport aux autres cultures pour les ménages ayant un manque de production calorique: son rendement calorique par hectare par an est plus élévé, sa production est moins handicapée par les sols infertiles, et sa récolte est quasi-constante. La pression démographique et la non-disponibilité des terres indiquent que la patate pourra être de plus en plus favorisée comme une culture d'avenir. Mais le Rwanda deviendra probablement déficitaire en termes caloriques d'ici l'an 2010.

# Liste de Documents de Travail de la Division des Statistiques Agricoles (DSA)

(Ancien Service des Enquêtes et Statistiques Agricoles--SESA)

NO: DT.01:

ENQUETE SUR LES PRIX. DESCRIPTION DES SERIES DES PRIX DEJA EXISTANTS, par J. Chrysostome MUKENZANGAGO, 1987, 47 pages, 500 FRWS.

Ce document se propose de contribuer à une meilleure connaissance des données actuellement disponibles au Rwanda en ce qui concerne les statistiques agricoles. Différentes sources fournissent pour le moment des prix agricoles: MINIPLAN, BNR, MINAGRI, MINIFINECO et OPROVIA; on peut trouver la méthodologie utilisée par chaque unité pour effectuer les relevés des prix et ainsi queleurs fréquences. Par exemple, OPROVIA/GRENARWA effectue des relevés hebdomadaires des prix des denrées alimentaires qui entrent dans les activités de stockage. Ainsi, les utilisateurs pourront comprendre les informations que ces données représentent sans effectuer des déplacements inutiles. A la fin de la brochure, se trouvent les prix du MINIPLAN, du MINAGRI et de la BNR pour mettre à la disposition des personnes intéressées, les prix provenant de différentes sources.

NO: DT.02:

PROBLEMATIQUE DU NIVEAU DES TRANSACTIONS DU HARICOT AU RWANDA. Résultats de six mois d'observations. 1985-1986, par Scott LOVERIDGE, Yvan DEJAEGHER et Serge RWAMASIRABO, 1986, 11 pages, 300 FRWS.

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Cette brochure renferme une liste de tableaux permettant de mieux comprendre "la problématique du niveau des transactions du haricot au Rwanda" d'après les résultats de six mois d'observations. L'étude a montré que la production du haricot est déficitaire et ceci entraîne une importation significative du haricot des pays voisins ainsi que certaines conséquences. La stratégie idéale peut être de maintenir l'auto-suffisance dans des produits encombrants et à haute teneur calorifique tout en comptant sur des régions adjacentes pour des quantités supplémentaires de produits à marge commerciale inférieure.

NO. DT.03:

RELATIONS ENTRE LA PRODUCTION, LA COMMERCIALISATION, LE PRIX ET LA SECURITE ALIMENTAIRE DE CERTAINS PRODUITS 'VIVRIERS STOCKABLES AU RWANDA, 1986, 14 pages, 300 FRWS.

Le projet de recherche s'est essentiellement centré sur l'identification et la meilleure compréhension des barrières à l'augmentation de la production et de la productivité à long terme des systèmes de productions vivrières nationaux. La stratégie alimentaire nationale que le gouvernement rwandais a mise au point pour augmenter la production totale et la consommation; son appui sur les centres de recherche pour renforcer sa capacité technologique, l'investissement pour l'amélioration des routes et les coopératives ont été favorisées. A été établi aussi avec l'assistance des pays donateurs, un système de stockage (GRENARWA). L'objectif de toutes ces recherches étant de constituer des ensembles des données existantes et complémentaires et qui seront utiles pour une analyse future.

NO. DT.04:

PRODUCTION, MARKETS, PRICES AND FOOD SECURITY RELATIONSHIPS AMONG SELECTED COMMODITIES IN RWANDA, 1986, 14 pages, 300 FRWS.

Version anglaise du Document de Travail DT.03.

NO. DT.05

RELATIONSHIPS BETWEEN FOOD PRODUCTION, MARKETING, AND FARMER PERCEPTIONS IN FIVE PREFECTURES OF RWANDA, par Scott LOVERIDGE of Michael T. WEBER, 1986, 40 pages, 400 FRWS.

Ce document présente les résultats d'une enquête menée sur un sous-échantillon de 250 des 1092 ménages enquêtés par le SESA. L'étude montre que les stratégies de sécurité alimentaire des ménages changent selon leur niveau de production calorique.

NO. DT.06: QUELQUES OBSERVATIONS SUR LES PROGRAMMES DE FIXATION DU PRIX PLANCHER ET DE RECHERCHE SUR LE HARICOT AU RWANDA, 1987, 10 pages, 300 FRWS.

L'étude spécifie les vendeurs et acheteurs nets du haricot et les contraintes de chacun. Il y a lieu de se demander quelles seraient les conséquences de taxer le café afin d'utiliser une partie de ce revenu pour soutenir le prix du haricot. Il est indiqué aussi les contraintes qui font que le fait d'augmenter le prix n'incite pas nécessairement le producteur à augmenter sa production. L'étude montre également les différentes considérations sur lesquelles le gouvernement devrait s'appuyer et qui jouent un rôle très important dans la sécurité alimentaire.

NO. DT.07: OBSERVATIONS ON PRICE SUPPORT AND RESEARCH PROGRAMS FOR BEANS IN RWANDA, 1987, 10 pages, 300 FRWS.

Version anglaise du Document de Travail DT.06.

NO. DT.08: REGIONAL INTEGRATION OF FOOD PRICES IN RWANDA, 1970-1986, par Sharon BYLENGA et Scott LOVERIDGE, 1987, 22 pages, 300 FRWS.

Version anglaise de la Publication P.09.

NO. DT.09: ATTITUDES, EXPERIENCES, CONDITIONS ET STRATEGIES DES EXPLOITANTS: Distributions de Fréquence. "Résultats d'une Enquête Ponctuelle auprès des Ménages Ruraux", par Théobald KAMPAYANA, 1987, 30 pages, 300 FRWS.

Cette publication montre des tableaux où figure la distribution de fréquence des réponses des exploitants rwandais à certaines questions concernant les stocks, l'achat et la vente des produits vivriers, les prix incitateurs, les sources d'information en matière d'agriculture et le budget familial par préfecture.

NO: DT.10: LA PRODUCTION DE CERTAINES CULTURES VIVRIERES: La Sécheresse de 1984 Comparée à une Année Normale (1986), la Répartition Mensuelle de la Production Agricole et son Impact Possible sur la Stratégie Alimentaire, par Yvan DEJAEGHER et NGARAMBE Octavien, 1987, 20 pages, 300 FRWS.

La sécheresse de 1984 a beaucoup plus frappé les cultures de la deuxième saison, telles que les haricots, maïs et les patates douces. Les céréales, le manioc, et les bananes ont été très peu touchés par la sécheresse de 1984. Certaines cultures, notamment la patate douce et la banane montrent une grande importance sur la sécurité alimentaire, car elles procurent aux producteurs une production quasi-constante durant toute l'année. L'agriculteur a tendance à allonger la période de récolte malgré que cela ne maximise pas les rendements pour éviter les risques. L'année 1986 montre que CYANGUGU, GIKONGORO, et GISENYI n'arrivent pas à satisfaire leurs besoins caloriques à partir de leurs productions.

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NO. DT.11: RELATIONSHIPS BETWEEN BEAN MARKETING AND BEAN PRODUCTION TECHNIQUES, Scott LOVERIDGE et Krista C. Dessen, 1987, 22 FRWS, 300 FRWS.

L'étude porte sur 15 ménages dans la Préfecture de KIGALI. Elle montre que les acheteurs nets de haricot sec ont tendance à utiliser plus de main-d'oeuvre par hectare dans leurs champs de haricot que les vendeurs nets de haricot sec.

NO. DT.12: OPTION DETAILLEE POUR L'HARMONISATION DE LA COLLECTE DES STATISTIQUES AGRICOLES AU RWANDA, par Gédéon MUDACUMURA, Tom ZALLA, et Hyacinthe FABIOLA, 1988, 19 pages, Stock épuisé.

Première proposition du SESA pour un système harmonisé de la collecte des statistiques agricoles qui a été présenté dans un séminaire du 4 février 1988 à KIGALI.

NO. DT.13: RESULTS OF A SURVEY ON FARM LEVEL SORGHUM MARKETINGS, par Scott LOVERIDGE et les cadres du SESA, 1988, 31 pages, 300 FRWS.

Version anglaise de la Publication P.11.

NO. DT.14: BIBLIOGRAPHIE DES RAPPORTS ASPAP/DAI, par Gregory C. LASSITER, 1989, 5 pages, 300 FRWS.

Ce rapport fournit un listing des rapports effectués sous le contrat USAID/Development Alternatives, Inc., contractant institutionnel du projet ASPAP. Ce listing contient des synthèses des réunions sur la planification des activités du projet, des termes de référence pour certaines études, des rapports de mission des consultants à court terme, des rapports semestriels des activités du projet, ainsi que les rapports d'analyse de données effectuées au sein du projet.

NO. DT.15: PROGRAMME DETAILLE POUR L'HARMONISATION DE LA COLLECTE DES STATISTIQUES AGRICOLES AU RWANDA, par Gédéon MUDACUMURA, Tom ZALLA, et Hyacinthe FABIOLA, 1988, 31 pages, Stock épuisé.

Version finale d'une proposition du SESA pour un système harmonisée de la collecte des statistiques agricoles qui a été présenté dans un séminaire du 13 mai 1988 à KIGALI.

NO. DT.16: PROPOSITION SUR LES ACTIVITES DE COLLECTE DES STATISTIQUES AGRICOLES PENDANT LA PREMIERE SAISON 1989, par Daniel C. CLAY, Hyacinthe FABIOLA, Jean KAYITSINGA, Gregory C. LASSITER, Octavien NGARAMBE, J.M.V. SEHENE, et Tom ZALLA, 1988, 41 pages, Stock épuisé.

Sommaire des nouvelles méthodes de collecte de statistiques, nouveaux questionnaires, et système de formation proposé pour la saison A 1989.

NO. DT.17: TENDANCES DE LA PRODUCTION ET SON IMPACT SUR LA SECURITE ALIMENTAIRE, par Octavien NGARAMBE, Gregory C. LASSITER et Scott LOVERIDGE, 1989, 10 pages, 300 FRWS.

Ce document aborde la composition de la production vivrière (en tonnes) et la production calorique par personne en milieu rural pendant les 5 dernières années. Les différentes tendances sont analysées suivant les préfectures et selon quelques produits typiques. Une comparaison des données sur les superficies démontre l'impact de la pression démographique sur l'utilisation des terres.

NO. DT.18: RELATIONS ENTRE LE COMPORTEMENT DES MENAGES DANS LE SECTEUR RURAL ET LES OBJECTIFS NATIONAUX A TRAVERS LES CULTURES SUI-VANTES: le Haricot, le Sorgho, la Patate douce et le Café, par Scott LOVERIDGE, 1989. 12 pages, 300 FRWS.

Cette étude examine la production et l'autosuffisance alimentaire en haricot et sorgho ainsi que le rôle important de la patate douce dans l'alimentation des petits exploitants du Rwanda. Le rôle du Café qui occupe pas mal des terres et qui est une source importante de revenu monétaires y est aussi abordé.

NO. DT.19: QUELQUES CARACTERISTIQUES DES MENAGES AGRICULTEURS-ELEVEURS, par Serge RWAMASIRABO, Hyacinthe Fabiola et Aloys MUNYANGAJU, 1989, 19 pages, 300 FRWS.

Ce document expose certaines caractéristiques saillantes des ménages agriculteurs-éleveurs qui permettront de mieux orienter l'étude vers l'identification des potentialités économiques de l'élevage des caprins.

NO. DT.20: SECURITE FONCIERE F DUCTION AGRICOLE DANS UN CONTEXTE DE FORTE PRESSION F HIQUE. (Expérience du Rwanda), par Benoît BLAREL, 1989 ages, 300 FRWS.

Ce document aborde l'analyse d. ganisation du secteur agraire en particulier le régime foncier et le morcellement des terres au Rwanda. Un essaie de réflechir sur la situation actuelle du régime foncier traditionnel et identifier ces contraintes sur le développement du secteur agricole.

NO. DT.21: STRATEGIES NON-AGRICOLES AU RWANDA: Rapport Préliminaire, par Daniel CLAY, Jean KAYITSINGA, Théobald KAMPAYANA, Innocent NGEZI et Jennifer OLSON, 1989, 16 pages, 300 "RWS.

L'étude essaie de découvrir certaine, stratégies suivies par les paysans rwandais pour confronter le problème de la diminution de la taille de leurs exploitations. L'accent est mis sur l'emploi alternatif, la migration et le contrôle de la fécondité.

NO. DT.22: RECAPITULATION DES RESULTATS DES DIFFERENTES PRESENTATIONS, par Serge RWAMASIRABO et Tom ZALLA, 1989, 10 pages, 300 FRVS.

Ce document résume les études des documents de travail DT. 17 à DT. 21.

NO. DT.23: JOURNEES DE REFLEXION SUR LES CONTRAINTES DE L'AGRICULTURE RWANDAISE ET LEURS IMPLICATIONS DANS LA FORMULATION DES POLITI-QUES AGRICOLES: Une Synthèse des Conclusions, par Serge RWAMASIRABO et Tom ZALLA, 1989, 9 pages, 300 FRWS.

Ce document compile les principales conclusions issues des débats menés sur les documents de travail D.T 17 à DT. 21.

NO. DT.24: QUESTIONNAIRES UTILISES DANS L'ENQUETE NATIONALE AGRICOLE: SAISON A 1989, 1 NOVEMBRE 1988 AU 28 FEVRIER 1989, par Hyacinthe FABIOLA, Jean KAYITSINGA, Greg Lassiter, Octavien NGARAMBE, et Jean-Léonard NGIRUMWAMI, 1989, 53 pages, 500 FRWS.

Ce document est composé des photocopies des questionnaires menés sur l'échantillon DSA au cours de la première saison culturale 1989.

NO. DT.25: QUESTIONNAIRES UTILISES DANS L'ENQUETE NATIONALE AGRICOLE: SAISON B 1989, 1 MARS 1989 AU 31 OCTOBRE 1989, par Hyacinthe FABIOLA, Jean KAYITSINGA, Greg Lassiter, Octavien NGARAMBE, Jean-Léonard NGIRUMWAMI, et Serge RWAMASIRABO, 1989, 53 pages, 500 FRWS.

Ce document est composé des photocopies des questionnaires menés sur l'échantillon DSA au cours de la deuxième saison culturale 1989.

# Liste de Réimpressions de la Division des Statistiques Agricoles (DSA)

(Ancien Service des Enquêtes et Statistiques Agricoles--SESA)

NO. R.01:

USES OF FARM AND MARKET DATA TO INFORM FOOD SECURITY POLICY IN RWANDA, par Scott LOVERIDGE, 1988, 550 pages, Stock épuisé.

Il s'agit d'une Thèse de Doctorat en Economie Agricole. Une condensation de ce document est reprise en français dans la publication P.16. Certains modèles économétriques sont présentés ici alors qu'ils ne figurent pas dans la publication P.16. Présentés en annexes sont les questionnaires utilisés lors de la recherche.

NO. R.02:

COMMENT INFORMER LES DECISIONS TRAITANT DE LA SECURITE ALIMENTAIRE EN AFRIQUE: ANALYSES EMPIRIQUES ET DIALOGUE POLITIQUE, par Michael T. WEBER, John M. STAATZ, John S. HOLTZMAN, Eric W. CRAWFORD, et Richard H. BERNSTEN, 1989, 13 pages, 300 FRWS.

Il s'agit de la traduction d'un article publié dans American Journal of Agricultural Economics. L'article présente d'abord un aperçu historique du dialogue sur la politique agricole en Afrique depuis les années 70. Les auteurs suggèrent qu'il n'existe pas des solutions "recette" qu'on peut appliquer à chaque pays. L'article montre que la supposition que la majorité des producteurs est vendeur net des produits importants est fausse dans les pays suivants: Mali, Sénégal, Somalie, Rwanda, et Zimbabwe. Ceci implique que les efforts d'augmenter les prix de certains denrées agricoles peut appauvrir aussi bien les habitants des villes qu'une grande partie de la population rurale. L'assistance technique doit travailler conjointement avec les gouvernements africains pour développer les banques de données pertinentes pour les décisions à prendre et pour vulgariser les informations déjà recueillies.